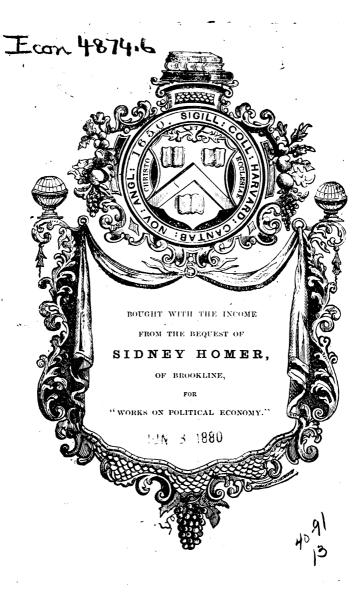
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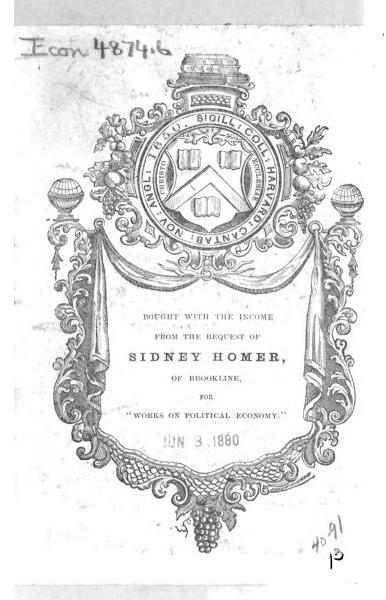


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BANK RATE

IN

ENGLAND, FRANCE, AND GERMANY, 1844—1878.

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BANK RATE

IN

ENGLAND, FRANCE, AND GERMANY, 1844—1878.

WITH REMARKS ON THE CAUSES WHICH INFLUENCE THE RATE OF INTEREST CHARGED;

AND

AN ANALYSIS OF THE ACCOUNTS OF THE BANK OF ENGLAND.

Robert Carry BY R. H. INGLIS PALGRAVE.

O[†]LONDON: EFFINGHAM WILSON, BOYAL EXCHANGE. 1880.

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- Table XVI. (Page 124) Contains statement of the alterations in the Bank of England Rate of Discount for 1877-78, with the Reserve of the Bank of England, the London Bankers' Balances, and the Clearing House Returns, at the nearest date to each change. (London Bankers' Balances not given for 1878.)
- Table XVII. (Page 125) Contains the Proportion of the Reserve of the Bank of England to the Liabilities, on the nearest date given to each change in the Rate of Discount, 1844 to 1878, arranged according to the dates when the changes occurred; and also of the Proportion which the Balances of the London Bankers kept with the Bank of England bore to the Reserve of the Bank itself on those dates.

On some occasions the Total Reserve of the Bank of England has not equalled the Balances of the London Bankers deposited with it. The Proportion of the Reserve to these Balances is given on the occasions when this was the case.

Table XVIII. (Page 131) Contains the proportion of the Reserve of the Bank of England to the liabilities on the nearest date given to each change in the Rate of Interest, 1844 to 1878, arranged from the highest Proportion of Reserve at each change to the lowest; and (page 136) the Averages of the same.

PREFACE.

This volume was originally planned as an investigation into the published accounts of the Bank of England alone, and it is based on the "Analysis of the Accounts of the Bank of England," which I published in 1874. But since that date the connection between the English Money Market and that of Europe generally has been drawn so much more closely together that I felt it needful to carry the inquiry further, and to include some notice of the transactions of the Banks of France and Germany. While, therefore, the analysis of the accounts of the Bank of England previously mentioned has been incorporated in these pages, much has been added, some part of which has appeared, though in a somewhat different form, in the Economist and the Bankers' Magazine. The accounts of the Bank of England, however, supply the staple of the work.

The amount of the reserve held by the Bank of England is always carefully noted by business men; and the weekly statements are invariably and closely examined as they appear. I have, therefore, thought that an analysis of these accounts might be of service to those who are engaged in business by assisting them in these investigations.

Some Returns published by order of the House of Commons, supply information which is not given in the weekly statements. This, in particular, was the case with regard to the balances kept by the London Bankers with the Bank of England to the close of 1877. I have included the information thus furnished in this analysis, as it shows the amount of money held ready to meet the immediate requirements of business.

During the period under consideration the amounts of the balances of the London Bankers largely and progressively increased, as far as this can be traced. It is a matter of regret that the Official Returns no longer enable this point to be ascertained with accuracy. There can be little doubt that a regular publication of the amounts would be of service to the community, and no good reason can be given for this information being withheld. In times when apprehensions prevailed, the knowledge that preparation was being made to meet any difficulties which might occur would of itself tend to allay alarm, and would assist in maintaining that feeling of confidence without which it is impossible that business should be suitably carried on.

The protection of the notes of the Bank of England rather than of the deposits of the Bank, was the object of the Bank Act of 1844. I have no intention in this place to inquire into the policy on which that Act was founded, but to investigate some of the events which have occurred since it was passed. Of late years the amount of the reserve of the Bank of England has on an average increased; but the proportion borne by that reserve to the total liabilities has, on the whole, diminished. The average proportion of reserve to total liabilities was 53 per cent. for the years 1845-53; while for the years 1870-78, it was 44 per cent. The average

rate of discount, which was 3l 4s 10d for the earlier was 3l 9s 1d for the later period. Of recent years a greater number of fluctuations in the rate of discount, and, on the whole, a higher rate, has prevailed. Meanwhile a vast increase in the amount of money held by bankers on deposit has taken place. Thus while the available supply of money has increased, there have likewise been far greater fluctuations in its price.

Great instability in the rate of Discount is undoubtedly a very prejudicial thing to the interests of commerce. Such an instability tends to render the results of trade more uncertain than they otherwise would be, and hence introduces an additional element of speculation in transactions where none further is needed. Meanwhile we must bear in mind that while the reserve which the Bank of England keeps is now generally somewhat smaller in proportion to its own liabilities than it was twenty or thirty years since, it is far smaller in proportion to the liabilities of the other banks of the United Kingdom at the present time than at any earlier period. Yet it is to that reserve alone that the other banks must have recourse in any time of pressure. The maintenance of an adequate reserve is a point of primary importance to all interested in banking and in commerce generally, and every endeavour should be made which will conduce to this result.

The Directors of the Bank of England feel, no doubt satisfied that the reserve they maintain is adequate to their own requirements, but it is only needful to glance at the vast amount of Banking Deposits now held to see how entirely inadequate it is when regarded as the reserve of all the banks of the Kingdom. Matters have gradually drifted into this position. The arrangement is an anomalous one, but what we are concerned with now is not to discuss the manner in which it has arisen, but to consider how the existing system may be strengthened and improved. The subject is almost beyond the power of any private inquirer, however diligent, however well-informed, to investigate completely; and it certainly appears that it would now be of advantage to the community if an inquiry were made into the whole bearings of the question through the instrumentality of a Government Commission to be appointed for the purpose.

It is quite a doubtful question whether even from the point of view of "profit and loss," the economy of our reserve system has not been carried too far, and whether a system in which a larger reserve was maintained would not be an advantage to the banking as well as to the mercantile community, by tending to mitigate those frequent fluctuations which now constantly characterise our money market. That the cost of the maintenance of such a reserve should fall on the Bank alone appears scarcely equitable; arrangements might, however, be made which would bring every bank in the country into connection with the Bank, and on the basis of which a suitable reserve might be maintained. The closer relations which now exist between the Money Markets of England, Europe generally, and, it should be added, of America, render this subject one of high importance to the stability of business.

R. H. INGLIS PALGRAVE.

CHAPTER I.

INTRODUCTION.

THE weekly return of the Bank of England is always carefully studied, as supplying much useful information on the position of the money market. The demands likely to be made on the "Reserve," and the proportion held by it to the "Liabilities," form the basis of most of those calculations which are continually being made by those engaged in business as to the probability of a rise or fall in the Bank rate of discount. The form in which the usual statement is made out supplies a great deal of information, but it leaves one or two very important points unnoticed. AReturns, however, which have been published by order of the House of Commons, supplement the information on the subject. Of these returns the one marked No. 6 in the Appendix to the Report from the Select (Secret) Committee on Commercial Distress, House of Commons, 1848, may be cited first, as it carries the statement back to the date when the Bank Act came into operation. This return is reprinted, and continued to December, 1856, in the Appendix (No. 13) to the Report from the Select Committee on the Bank Acts, House of Commons, 1857. Subsequent returns continue a consecutive statement, on a uniform plan, from the date of the division of the two departments of the Bank of England, in 1844, to the close of 1875, containing particulars which are not included in the ordinary returns, of the total amount of bills discounted, and total amount of temporary advances made by the Bank, and the balances of the London bankers.

The return, however, which was ordered by the House of Commons to be printed 31st May, 1877, giving the statement for the year 1876, while it separates the amounts of the balances of the Exchequer and of the London bankers from the total deposits. does not continue to furnish either the amount of "bills discounted" or of the "temporary advances," which had been uniformly given from 1844 downwards in the previous returns. The corresponding return for 1877 is likewise deficient in the same manner, and in the return for 1878 the London bankers' balances were altogether left out. These omissions are to be regretted, as much in the interest of the Bank of England itself as of the public at large. The discount of bills, and the making temporary advances, are both proper functions of a bank. In the case of the Bank of England it is especially desirable that there should be no uncertainty as to the extent of its operation on these points, as it is mainly in this manner that its control over the outer market is maintained. The full possession of that control, and the power of exercising it rapidly when circumstances render it needful, are essential to the security both of the Bank of England and of the other banks of the country, and it cannot therefore be an unimportant matter that the information which shows the action of the Bank in this respect should now no longer be supplied.

It would also be very valuable if the information given in return No. 8 in the Appendix to the Report from the Select (Secret) Committee on Commercial Distress, House of Commons, 1848, were continued to the present time. This return, which is carried back to the year 1832, through the Appendix to the Report from Select Committees on Banks of Issue, House of Com-

mons, 1840 and 1841, gives a great deal of very important information as to the working of the Bank of England. It is in no spirit of idle curiosity, with no desire to pry needlessly into the concerns of others, that the continuation of this information is sought. Those who feel, as all concerned in banking business must, that the enormous extension which that business has experienced in this country during the last thirty years, requires every safeguard to be strengthened, must regret that a closer secrecy is now maintained on matters on which more publicity was freely given at previous times when this publicity was less needed. If that information was valuable in 1832, 1844, and 1848, it would be even more valuable now.

Such information, however, as can be obtained from the materials at our command on the history of the working of the money market during the last thirtyfour years may be very useful to all who are engaged in commercial pursuits. These years have witnessed a very marvellous extension of the commerce of the country in general; and the extension of banking business has fully kept pace with the increase in other directions. The Parliamentary returns relating to the Bank of England, carried on week by week, contain the record of many important events; but the very length of the returns is a bar to facility in consulting them, or in understanding the many important lessons which may be learned from their pages. is often a difficult matter, in subjects of this nature, which depend on a vast multitude of details, to arrive at a just appreciation of the exact bearing which these details have on the questions at issue. The number of details, through their very quantity, have a tendency to obscure a distinct view of the case. It is hoped, therefore, that the analysis which follows may be of service by giving a history of the main alterations which have occurred in the position of the Bank of England during the time over which these returns extend, which may enable us to trace out some of the causes which have led to the greatly increased fluctuations which have

prevailed in the money market during some of the last few years. It should be clearly understood from the outset that the object of this work is neither a controversial investigation into the working of the Act of 1844, nor a critical inquiry into the conduct of the Bank of England. That great institution is, from its position, the acknowledged centre of our banking system; and an analysis of its transactions may enable us to see more clearly the progress of recent events in the financial world. In order to render this clear and readily intelligible, a series of tables has been drawn up. Into these the main points of the work of the Bank of England for the years from 1844 to 1878 have been condensed.

This has been done with the utmost care, and it is hoped that any error of importance has been avoided.

Since I first began to write on this subject, several events have occurred which have introduced very important influences among the money markets of Europe. The limitation in the coinage of silver by the countries forming the Latin Union; the resumption of specie payments in France, and also in the United States: the alteration in the standard of value in Germany from a silver to a gold basis—are all events which could not take place without greatly affecting this country. These events have made it desirable to carry the investigation further than was first proposed. It has not been thought needful to form a complete analysis of the tranactions of the Banks of France and Germany in the same manner as those of the Bank of England. A comparison of the rates of interest charged in the three countries, and the number of the fluctuations in the rates, give what is a sufficient outline for the purpose desired—an outline of the working of the demand and supply of money in the leading countries of Europe for the time under consideration.

Tables relating to the variations in the rate of interest charged by the Banks of France and Germany, drawn up on the same plan as the corresponding tables referring to the Bank of England, have therefore been

added, and also tables giving the number of the alterations of the rates. These are valuable, as they give an outline of the working of business in those countries; they also supply a comparative view of the movements of the rate of interest in other European centres of business which may enable us the better to understand the influences which are at work on our own.

A description of the tables which form the basis of this analysis precedes this Chapter. The table analysing the accounts of the Bank of England in a series of annual averages follows.

TABLE I.—BANK
ANNUAL AVERAGES OF THE TRANSACTIONS OF THE

	. 1	2	3	4	5	6
Date.	Annual Average of Liabilities on Deposits (Public and Private) and Bank Post Bills.	Proportion of Liabilities to 1844. 1844=100.	Annual Average of Bank Post Bills.	Proportion of Bank Post Bills to 1844. 1844=100.	Annual Average of Public Deposits.	Proportion of Public Deposits to 1844.
	£		£		£	
1844	14,317,000	100	1,017,000	100	5,231,000	100
1845	16,367,000	115	1,059,000	104	5,665,000	108
	,,		' '			
1846	20,262,000	142	938,000	92	6,254,000	120
1847		111	859,000	85	6,446,000	123
1848	15,963,000	111	1,000,000	98	5,154,000	99
1849	17,211,000	120	1,083,000	107	6,086,000	116
1850	18,822,000	131	1,225,000	121	7,772,000	149
1851		123	1,159,000	114	7,128,000	136
1852	20,149,000	140	1,303,000	128	6,010,000	115
1853		136	1,379,000	136	5,682,000	109
1854	15,740,000	110	1,083,000	107	3,641,000	70
1855	17,698,000	124	982,000	96	5,005,000	96
1856	16,864,000	117	841,000	83	4,840,000	93
1857	17,828,000	124	771,000	76	6,380,000	122
1858	20,847,000	145	824,000	81	5,884,000	113
1859	22,530,000	157	818,000	81	7,319,000	140
1860	20,893,000	145	729,000	72	6,646,000	127
1861	18,481,000	130	670,000	66	5,281,000	101
1862	22,414,000	156	720,000	71	7,052,000	135
1863		153	644,000	63	7,327,000	140
1864	20,600,000	144	531,000	52	6,870,000	132
1865	21,200,000	148	493,000	49	6,707,000	128
1866	22,603,000	158	539,000	53	5,318,000	102
1867	26,106,000	182	504,000	50	6,812,000	130
1868		179	544,000	54	4,906,000	94
1869	23,713,000	165	497,000	49	5,129,000	98
1870	26,358,000	184	623,000	61	7,635,000	146
1871	29,022,000	202	629,000	62	7,071,000	135
1872	29,268,00C	204	407,000	40	8,875,000	169
1873		202	405,000	40	9,422,000	180
1874	25,476,000	178	378,000	37	6,251,000	120
1875	26,768,000	187	355,000	35	5,223,000	99
1876	30,616,000	214	330,000	32	6,793,000	130
1877	28,732,000	200	320,000	31	5,838,000	112
1878	29,077,000	203	288,000	28	5,560,000	106

OF ENGLAND.

Bank of England for the Years 1844-1878.

					, 	
7	8	9	10	11	12	
Annual Average of Private	Proportion of Private Deposits to 1844.	Annual Average of Total	Proportion of Total Deposits to 1844.	Annual Average of London Bankers' Balances, Included in	Proportion of London Bankers' Balances to	Date.
Deposits.	1844=100.	Deposits.	1844=100.	Private Deposits (Col. 7).	1844. 1844=100.	
£	ł	£		£		
8,069,000	100	13,300,000	100	977,000	100	1844
9,643,000	120	15,308,000	115	1,256,000	128	1845
13,070,000 8,668,000 9,809,000 10,042,000	161 107 122 124	19,324,000 15,114,000 14,963,000 16,128,000	145 113 112 121	1,558,000 1,467,000 2,359,000 2,131,000	160 150 241 218	1846 1847 1848 1849
9,825,000 9,351,000 12,836,000 13,482,000 11,016,000	122 116 158 167 136	17,597,000 16,479,000 18,846,000 19,164,000 14,657,000	132 124 141 143 110	1,656,000 1,666,000 3,184,000 2,259,000 2,692,000	170 170 326 231 275	1850 1851 1852 1853 1854
11,711,000 11,183,000 10,677,000 14,139,000 14,393,000	145 139 133 175 178	16,716,000 16,023,000 17,057,000 20,023,000 21,712,000	126 120 128 150 163	3,065,000 3,032,000 3,274,000 4,639,000 4,256,000	313 310 335 475 435	1855 1856 1857 1858 1859
13,518,000 12,530,000 14,642,000 13,975,000 13,199,000	167 155 181 173 164	20,164,000 17,811,000 21,694,000 21,302,000 20,069,000	151 134 163 160 150	4,283,000 4,185,000 5,030,000 4,726,000 4,899,000	438 428 515 484 502	1860 1861 1862 1863 1864
14,000,000 16,746,000 18,790,000 20,169,000 18,087,000	173 207 233 250 224	20,707,000 22,064,000 25,602,000 25,075,000 23,216,000	155 165 192 188 174	5,038,000 6,259,000 6,689,000 6,801,000 6,479,000	512 641 685 696 663	1865 1866 1867 1868 1869
18,100,000 21,322,000 19,986,000 19,073,000 18,847,000	224 264 248 236 233	25,735,000 28,393,000 28,861,000 28,495,000 25,098,000	193 213 216 214 189	6,618,000 8,390,000 7,609,000 8,586,000 8,341,000	678 859 778 878 854	1870 1871 1872 1873 1874
21,190,000 23,493,000 22,574,000 23,229,000	263 291 279 287	26,413,000 30,286,000 28,412,000 28,789,000	198 228 213 216	10,324,000 11,851,000 9,543,000 —	1055 1212 976 —	1875 1876 1877 1878

Table I.—Bank of England (continued) — Years 1844-78. (Pages 6-11.)

Col. 22. Annual Average of Bills Discounted by the Bank of England—Years 1844 to 1875.

Col. 23. Proportion of Bills Discounted to 1844.

Col. 24. Proportion of Bills Discounted to Total of "Other" Securities from 1844 to 1875.

Col. 25. Annual Average of the Temporary Advances — Years 1844 to 1875.

Col. 26. Proportion of Temporary Advances to 1844.

Col. 27. Annual Average of the Provincial Circulation of Bank of England Notes—Years 1844 to 1875.

Col. 28. Proportion per Cent. of Provincial Circulation to total Circulation—Years 1844 to 1875.

Col. 29. Annual Average of the London Circulation of Bank of England Notes—Years 1844 to 1875.

Col. 30. Proportion per Cent. of London Circulation to total Circulation—Years 1844 to 1875.

Col. 31. Annual Average of the total Note Circulation of Bank of England.

Col. 32. Proportion of Total Circulation to 1844.

Col. 33. Annual Average of the Coin and Bullion held.

Col. 34. Proportion of Bullion to 1844.

Col. 35. Proportion per Cent. of Bullion to Liabilities on Deposits and Bank Post Bills.

Col. 36. Proportion per Cent. of Bullion to Circulation.

Col. 37. Proportion per Cent. of Bullion to Liabilities on Deposits, &c., and Circulation combined.

Col. 38. Average Annual Minimum Rate of Discount.

- Table II. (Page 20) Contains the Monthly Averages of Liabilities and Reserve of the Bank of England from 1845 to 1878, showing the proportion of Reserve to liabilities each month during the period, and of the Reserve each month to the Average of the Year, with (page 31) the Proportions for the seventeen years, 1845-1861, 1862-1878, and (page 32) for the thirty-four years, 1845-1878, collectively.
- Table III. (Page 35) Contains the weekly statement of the Bank of England. Arranged so as to show the Proportion of the Reserve to the Liabilities, after deducting the Balances of the London Bankers from both.
- Table IV. (Page 61) Contains the Monthly Averages of Minimum Rate of Discount charged by the Banks of England, France, and Germany for the 8 Years, 1846-53, 1854-61, 1862-69, 1870-77, and for the 16 Years, 1846-61, 1862-77.

- Table V. (Page 64) Contains the Bankers' Clearing House Returns. Arranged so as to show the Amount of Business passing through the Clearing House in each Month of the Year. Years 1868-1878.
- Table VI. (Page 74) Contains the Monthly Averages of the Bank of England published minimum Rates of Discount from 1845 to 1878, and the proportion of the Rate charged each Month to the average Rate of the Year, with (page 77) the average monthly Rate for the Years 1845-1878, collectively.
- Table VII. (Page 78) Contains the changes in the Rate of Discount charged by the Bank of England, and the number of days at each Rate in each Year since the Bank Act came into operation in 1844 to 1878.
- Table VIII. (Page 88) Contains the Monthly Averages of Bank of France published minimum Rates of Discount from 1845 to 1878, and the proportion of the Rate charged each Month to the average Rate of the Year, with (page 91) the average Monthly Rate for the Years 1845-1878, collectively.
- Table IX. (Page 92) Contains the changes in the Rate of Discount charged by the Bank of France, and the number of days at each Rate in each year from 1844 to 1878.
- Table X. (Page 98) Contains the Monthly Averages of Bank of Germany published minimum Rates of Discount from 1845 to 1878, and the proportion of the Rate charged each Month to the Average Rate of the Year, with (page 101) the Average Monthly Rate for the Years 1845-1878, collectively.
- Table XI. (Page 102) Contains the changes in the Rate of Discount charged by the Bank of Germany, and the number of days at each Rate in each year from 1844 to 1878.
- Table XII. (Page 109) Contains the Monthly Average minimum Rate of Discount of the Banks of England, France, and Germany, for the seventeen Years, 1845-1861, 1862-1878, and for the thirty-four Years, 1845-1878, collectively.
- Table XIII. (Page 110) Contains the Rate of Discount of the Banks of England, France and Germany. The number of days at each Rate, Arranged from the highest number to the lowest, and from the lowest rate to the highest.

- Table XIV. (Page 118) Contains Annual Average of Silver Bullion held by the Bank of England during the years 1844 and 1853, and Proportion of the same to the Gold Bullion and coin held.
- Table XV. (Page 120) Contains the composition of Bank of England Note Circulation. Divided according to the denominations of the Notes in hands of the public from 1856 to 1876.
- Table XVI. (Page 124) Contains statement of the alterations in the Bank of England Rate of Discount for 1877-78, with the Reserve of the Bank of England, the London Bankers' Balances, and the Clearing House Returns, at the nearest date to each change. (London Bankers' Balances not given for 1878.)
- Table XVII. (Page 125) Contains the Proportion of the Reserve of the Bank of England to the Liabilities, on the nearest date given to each change in the Rate of Discount, 1844 to 1878, arranged according to the dates when the changes occurred; and also of the Proportion which the Balances of the London Bankers kept with the Bank of England bore to the Reserve of the Bank itself on those dates.

On some occasions the Total Reserve of the Bank of England has not equalled the Balances of the London Bankers deposited with it. The Proportion of the Reserve to these Balances is given on the occasions when this was the case.

Table XVIII. (Page 131) Contains the proportion of the Reserve of the Bank of England to the liabilities on the nearest date given to each change in the Rate of Interest, 1844 to 1878, arranged from the highest Proportion of Reserve at each change to the lowest; and (page 136) the Averages of the same.

PREFACE.

This volume was originally planned as an investigation into the published accounts of the Bank of England alone, and it is based on the "Analysis of the Accounts of the Bank of England," which I published in 1874. But since that date the connection between the English Money Market and that of Europe generally has been drawn so much more closely together that I felt it needful to carry the inquiry further, and to include some notice of the transactions of the Banks of France and Germany. While, therefore, the analysis of the accounts of the Bank of England previously mentioned has been incorporated in these pages, much has been added, some part of which has appeared, though in a somewhat different form, in the Economist and the Bankers' Magazine. The accounts of the Bank of England, however, supply the staple of the work.

The amount of the reserve held by the Bank of England is always carefully noted by business men; and the weekly statements are invariably and closely examined as they appear. I have, therefore, thought that an analysis of these accounts might be of service to those who are engaged in business by assisting them in these investigations.

Some Returns published by order of the House of Commons, supply information which is not given in the weekly statements. This, in particular, was the case with regard to the balances kept by the London Bankers with the Bank of England to the close of 1877. I have included the information thus furnished in this analysis, as it shows the amount of money held ready to meet the immediate requirements of business.

During the period under consideration the amounts of the balances of the London Bankers largely and progressively increased, as far as this can be traced. It is a matter of regret that the Official Returns no longer enable this point to be ascertained with accuracy. There can be little doubt that a regular publication of the amounts would be of service to the community, and no good reason can be given for this information being withheld. In times when apprehensions prevailed, the knowledge that preparation was being made to meet any difficulties which might occur would of itself tend to allay alarm, and would assist in maintaining that feeling of confidence without which it is impossible that business should be suitably carried on.

The protection of the notes of the Bank of England rather than of the deposits of the Bank, was the object of the Bank Act of 1844. I have no intention in this place to inquire into the policy on which that Act was founded, but to investigate some of the events which have occurred since it was passed. Of late years the amount of the reserve of the Bank of England has on an average increased; but the proportion borne by that reserve to the total liabilities has, on the whole, diminished. The average proportion of reserve to total liabilities was 53 per cent. for the years 1845-53; while for the years 1870-78, it was 44 per cent. The average

rate of discount, which was 3l 4s 10d for the earlier was 3l 9s 1d for the later period. Of recent years a greater number of fluctuations in the rate of discount, and, on the whole, a higher rate, has prevailed. Meanwhile a vast increase in the amount of money held by bankers on deposit has taken place. Thus while the available supply of money has increased, there have likewise been far greater fluctuations in its price.

Great instability in the rate of Discount is undoubtedly a very prejudicial thing to the interests of commerce. Such an instability tends to render the results of trade more uncertain than they otherwise would be, and hence introduces an additional element of speculation in transactions where none further is needed. Meanwhile we must bear in mind that while the reserve which the Bank of England keeps is now generally somewhat smaller in proportion to its own liabilities than it was twenty or thirty years since, it is far smaller in proportion to the liabilities of the other banks of the United Kingdom at the present time than at any earlier period. Yet it is to that reserve alone that the other banks must have recourse in any time of pressure. The maintenance of an adequate reserve is a point of primary importance to all interested in banking and in commerce generally, and every endeavour should be made which will conduce to this result.

The Directors of the Bank of England feel, no doubt satisfied that the reserve they maintain is adequate to their own requirements, but it is only needful to glance at the vast amount of Banking Deposits now held to see how entirely inadequate it is when regarded as the reserve of all the banks of the Kingdom. Matters have gradually drifted into this position. The arrangement is an anomalous one, but what we are concerned with now is not to discuss the manner in which it has arisen, but to consider how the existing system may be strengthened and improved. The subject is almost beyond the power of any private inquirer, however diligent, however well-informed, to investigate completely; and it certainly appears that it would now be of advantage to the community if an inquiry were made into the whole bearings of the question through the instrumentality of a Government Commission to be appointed for the purpose.

It is quite a doubtful question whether even from the point of view of "profit and loss," the economy of our reserve system has not been carried too far, and whether a system in which a larger reserve was maintained would not be an advantage to the banking as well as to the mercantile community, by tending to mitigate those frequent fluctuations which now constantly characterise our money market. That the cost of the maintenance of such a reserve should fall on the Bank alone appears scarcely equitable; arrangements might, however, be made which would bring every bank in the country into connection with the Bank, and on the basis of which a suitable reserve might be maintained. The closer relations which now exist between the Money Markets of England, Europe generally, and, it should be added, of America, render this subject one of high importance to the stability of business.

R. H. INGLIS PALGRAVE.



ΙΝΤΒΟΡΠΟΤΙΟΝ.

THE weekly return of the Bank of England is always carefully studied, as supplying much useful information on the position of the money market. The demands likely to be made on the "Reserve," and the proportion held by it to the "Liabilities," form the basis of most of those calculations which are continually being made by those engaged in business as to the probability of a rise or fall in the Bank rate of discount. form in which the usual statement is made out supplies a great deal of information, but it leaves one or two very important points unnoticed. Returns, however, which have been published by order of the House of Commons, supplement the information on the subject. Of these returns the one marked No. 6 in the Appendix to the Report from the Select (Secret) Committee on Commercial Distress, House of Commons, 1848, may be cited first, as it carries the statement back to the date when the Bank Act came into operation. is reprinted, and continued to December, 1856, in the Appendix (No. 13) to the Report from the Select Committee on the Bank Acts, House of Commons, 1857. Subsequent returns continue a consecutive statement. on a uniform plan, from the date of the division of the

two departments of the Bank of England, in 1844, to the close of 1875, containing particulars which are not included in the ordinary returns, of the total amount of bills discounted, and total amount of temporary advances made by the Bank, and the balances of the London bankers.

The return, however, which was ordered by the House of Commons to be printed 31st May, 1877, giving the statement for the year 1876, while it separates the amounts of the balances of the Exchequer and of the London bankers from the total deposits, does not continue to furnish either the amount of "bills discounted" or of the "temporary advances," which had been uniformly given from 1844 downwards in the previous returns. The corresponding return for 1877 is likewise deficient in the same manner, and in the return for 1878 the London bankers' balances were altogether left out. These omissions are to be regretted. as much in the interest of the Bank of England itself as of the public at large. The discount of bills, and the making temporary advances, are both proper functions of a bank. In the case of the Bank of England it is especially desirable that there should be no uncertainty as to the extent of its operation on these points, as it is mainly in this manner that its control over the outer market is maintained. The full possession of that control, and the power of exercising it rapidly when circumstances render it needful, are essential to the security both of the Bank of England and of the other banks of the country, and it cannot therefore be an unimportant matter that the information which shows the action of the Bank in this respect should now no longer be supplied.

It would also be very valuable if the information given in return No. 8 in the Appendix to the Report from the Select (Secret) Committee on Commercial Distress, House of Commons, 1848, were continued to the present time. This return, which is carried back to the year 1832, through the Appendix to the Report from Select Committees on Banks of Issue, House of Com-

mons, 1840 and 1841, gives a great deal of very important information as to the working of the Bank of England. It is in no spirit of idle curiosity, with no desire to pry needlessly into the concerns of others, that the continuation of this information is sought. Those who feel, as all concerned in banking business must, that the enormous extension which that business has experienced in this country during the last thirty years, requires every safeguard to be strengthened, must regret that a closer secrecy is now maintained on matters on which more publicity was freely given at previous times when this publicity was less needed. If that information was valuable in 1832, 1844, and 1848, it would be even more valuable now.

Such information, however, as can be obtained from the materials at our command on the history of the working of the money market during the last thirtyfour years may be very useful to all who are engaged in commercial pursuits. These years have witnessed a very marvellous extension of the commerce of the country in general; and the extension of banking business has fully kept pace with the increase in other directions. The Parliamentary returns relating to the Bank of England, carried on week by week, contain the record of many important events; but the very length of the returns is a bar to facility in consulting them, or in understanding the many important lessons which may be learned from their pages. is often a difficult matter, in subjects of this nature, which depend on a vast multitude of details, to arrive at a just appreciation of the exact bearing which these details have on the questions at issue. The number of details, through their very quantity, have a tendency to obscure a distinct view of the case. It is hoped, therefore, that the analysis which follows may be of service by giving a history of the main alterations which have occurred in the position of the Bank of England during the time over which these returns extend, which may enable us to trace out some of the causes which have led to the greatly increased fluctuations which have

prevailed in the money market during some of the last few years. It should be clearly understood from the outset that the object of this work is neither a controversial investigation into the working of the Act of 1844, nor a critical inquiry into the conduct of the Bank of England. That great institution is, from its position, the acknowledged centre of our banking system; and an analysis of its transactions may enable us to see more clearly the progress of recent events in the financial world. In order to render this clear and readily intelligible, a series of tables has been drawn up. Into these the main points of the work of the Bank of England for the years from 1844 to 1878 have been condensed.

This has been done with the utmost care, and it is hoped that any error of importance has been avoided.

Since I first began to write on this subject, several events have occurred which have introduced very important influences among the money markets of Europe. The limitation in the coinage of silver by the countries forming the Latin Union; the resumption of specie payments in France, and also in the United States; the alteration in the standard of value in Germany from a silver to a gold basis—are all events which could not take place without greatly affecting this country. These events have made it desirable to carry the investigation further than was first proposed. It has not been thought needful to form a complete analysis of the tranactions of the Banks of France and Germany in the same manner as those of the Bank of England. A comparison of the rates of interest charged in the three countries, and the number of the fluctuations in the rates, give what is a sufficient outline for the purpose desired—an outline of the working of the demand and supply of money in the leading countries of Europe for the time under consideration.

Tables relating to the variations in the rate of interest charged by the Banks of France and Germany, drawn up on the same plan as the corresponding tables referring to the Bank of England, have therefore been

added, and also tables giving the number of the alterations of the rates. These are valuable, as they give an outline of the working of business in those countries; they also supply a comparative view of the movements of the rate of interest in other European centres of business which may enable us the better to understand the influences which are at work on our own.

A description of the tables which form the basis of this analysis precedes this Chapter. The table analysing the accounts of the Bank of England in a series of annual averages follows.

TABLE I.—BANK
ANNUAL AVERAGES OF THE TRANSACTIONS OF THE

	. 1	2	3	4	5	6
Date.	Annual Average of Liabilities on Deposits (Public and Private) and Bank Post Bills.	Proportion of Liabilities to 1844. 1844=100.	Annual Average of Bank Post Bills.	Proportion of Bank Post Bills to 1844. 1844=100.	Annual Average of Public Deposits.	Proportion of Public Deposits to 1844. 1844=100.
	£		£		£	
1844	14,317,000	100	1.017.000	100	5,231,000	100
1845	16,367,000	115	1,059,000	104	5,665,000	108
1846	20,262,000	142	938,000	92	6,254,000	120
1847	15,973,000	111	859,000	85	6,446,000	123
1848	15,963,000	111	1,000,000	98	5,154,000	99
1849	17,211,000	120	1,083,000	107	6,086,000	116
1850	18,822,000	131	1,225,000	121	7,772,000	149
1851	17,638,000	123	1,159,000	114	7,128,000	136
1852	20,149,000	140	1,303,000	128	6,010,000	115
1853	19,543,000	136	1,379,000	136	5,682,000	109
1854	15,740,000	110	1,083,000	107	3,641,000	70
1855	17,698,000	124	982,000	96	5,005,000	96
1856	16,864,000	117	841,000	83	4,840,000	93
1857	17,828,000	124	771,000	76	6,380,000	122
1858	20,847,000	145	824,000	81	5,884,000	113
1859	22,530,000	157	818,000	81	7,319,000	140
1860	20,893,000	145	729,000	72	6,646,000	127
1861	18,481,000	130	670,000	66	5,281,000	101
1862	22,414,000	156	720,000	71	7,052,000	135
1863	21,946,000	153	644,000	63	7,327,000	140
1864	20,600,000	144	531,000	52	6,870,000	132
1865	21,200,000	14 8	493,000	49	6,707,000	128
1866	22,603,000	158	539,000	53	5,318,000	102
1867	26,106,000	182	504,000	50	6,812,000	130
1868	25,619,000	179	544,000	54	4,906,000	94
1869	23,713,000	165	497,000	49	5,129,000	98
1870	26,358,000	184	623,000	61	7,635,000	146
1871	29,022,000	202	629,000	62	7,071,000	135
1872	29,268,000	204	407,000	40	8,875,000	169
1873	28,900,000	202	405,000	40	9,422,000	180
1874	25,476,000	178	378,000	37	6,251,000	120
1875	26,768,000	187	355,000	35	5,223,000	99
1876	30,616,000	214	330,000	32	6,793,000	130
1877	28,732,000	200	320,000	31	5,838,000	112
1878	29,077,000	203	288,000	28	5,560,000	106

OF ENGLAND.

BANK OF ENGLAND FOR THE YEARS 1844-1878.

7	8	9	10	11	12	
A	Proportion	A1	Proportion		Proportion	
Annual Average of	of Private	Annual Average of	of Total	of London Bankers'	of London Bankers'	
Private	Deposits to	Total	Deposits to 1844.	Balances, Included in	Balances to	Date.
Deposits.	1844=100.	Deposits.	1844=100.	Private Deposits	1844.	
				(Col. 7).	1844=100.	
£		£		£		
8,069,000	100	13,300,000	100	977,000	100	1844
9,643,000	120	15,308,000	115	1,256,000	128	1845
13,070,000	161	19,324,000	145	1,558,000	160	1846
8,668,000	107	15,114,000	113	1,467,000	150	1847
9,809,000	122	14,963,000	112	2,359,000	241	1848
10,042,000	124	16,128,000	121	2,131,000	218	1849
9,825,000	122	17,597,000	132	1,656,000	170	1850
9,351,000	116	16,479,000	124	1,666,000	170	1851
12,836,000	158	18,846,000	141	3,184,000	326	1852
13,482,000	167	19,164,000	143	2,259,000	231	1853
11,016,000	136	14,657,000	110	2,692,000	275	1854
11,711,000	145	16,716,000	126	3,065,000	313	1855
11,183,000	139	16,023,000	120	3,032,000	310	1856
10,677,000	133	17,057,000	128	3,274,000	335	1857
14,139,000	175	20,023,000	150	4,639,000	475	1858
14,393,000	178	21,712,000	163	4,256,000	435	1859
13,518,000	167	20,164,000	151	4,283,000	438	1860
12,530,000	155	17,811,000	134	4,185,000	428	1861
14,642,000	181	21,694,000	163	5,030,000	515	1862
13,975,000	173	21,302,000	160	4,726,000	484	1863
13,199,000	164	20,069,000	150	4,899,000	502	1864
14,000,000	173	20,707,000	155	5,038,000	512	1865
16,746,000	207	22,064,000	165	6,259,000	641	1866
18,790,000	233	25,602,000	192	6,689,000	685	1867
20,169,000	250	25,075,000	188	6,801,000	696	1868
18,087,000	224	23,216,000	174	6,479,000	663	1869
18,100,000	224	25,735,000	193	6,618,000	678	1870
	264		213	8,390,000	859	1871
21,322,000		28,393,000			778	1872
19,986,000	248	28,861,000	216	7,609,000		
19,073,000 18,847,000	236 233	28,495,000 25,098,000	214 189	8,586,000 8,341,000	878 854	1873 1874
•	}					
21,190,000	263	26,413,000	198	10,324,000	1055	1875
23,493,000	291	30,286,000	228	11,851,000	1212	1876
22,574,000	279	28,412,000	213	9,543,000	976	1877
23,229,000	287	28,789,000	216	<u> </u>	1 –	1878

TABLE I. Continued—BANK
ANNUAL AVERAGES OF THE TRANSACTIONS OF THE

	13	14	15	16	17	18	19
	Annual Average	Pro- portion of	Proportion per Cent. of	Proportion per Cent. of Reserve to Liabilities	Propor- tion per Cent.	Annual	Pro- portion of Other
. .	1	Reserve	Reserve	after	of	Average of	Securities
Date	Reserve of	to 1844.	to Lia- bilities on	Deducting Bankers'	London Bankers'	Other	to 1844.
•	Bank		Deposits	Balances	Balances		1
	of England.	1844 = 100.	and Bank PostBills.	from Reserve and Liabilities.	Reserve.	Securities.	1844 = 100.
	£		%	%	%	£	
1844	8,500,000	100	59	56	11	9,472,000	100
1845	8,516,000	100	52	48	15	12,215,000	129
1846	8,539,000	100	42	27	18	16,661,000	176
1847	5,291,000	62	33	37 26	27	17,241,000	182
1848	9,784,000	115	61	54	24	11,967,000	126
1849	10,694,000	126	62	57	20	10,222,000	108
1850	11,219,000	132	59	55	15	11,048,000	116
1851	9,103,000	107	52	46	18	12,642,000	13 3
1852		150	63	56	25	11,398,000	120
1853	8,907,000	103	46	38	25	15,086,000	159
1854	7,290,000	86	46	35	37	14,732,000	15 5
1855		98	47	36	37	15,316,000	162
1856		68	34	19	52	17,067,000	180
1857	5,347,000	63	30	14	бі	20,392,000	215
1858 1859		141	58	45	39	16,316,000	172
1009	11,076,000	129	49	37	39	18,196,000	192
1860		99	40	25	51	20,511,000	216
1861	7,611,000	89	41	24	55	18,738,000	198
1862		120	45	29	45	18,987,000	200
1863 1864		100 88	39	22	55 66	20,176,000	212
1004	7,478,000	00	36	16	00	20,296,000	214
1865		95	38	19	63	20,568,000	217
1866		79	30	3	93	22,962,000	242
1867		152	49	32	52	18,235,000	192
1868		140	46	27	57 62	17,647,000	186
1869	10,320,000	121	43	22	02	16,822,000	178
1870	12,435,000	146	47	29	53	18,622,000	197
1871		166	48	28	59	18,803,000	198
1872		141	41	21	63	21,466,000	226
1873		141	41	17	71	21,643,000	229
1874	11,035,000	129	43	15	75	18,487,000	195
1875	11,597,000	136	43	6	89	19,163,000	202
1876		187	52	22	74	17,502,000	185
1877	12,478,000	146	43	15	77	18,861,000	200
1878	10,879,000	127	37			20,424,000	215

OF ENGLAND.

BANK OF ENGLAND FOR THE YEARS 1844-1878.

					,		
20	21 Proportion	22	23	24	25	26	
Annual	of "Other"			ł		1	j
Average of	Securities			Propor-		Propor-	1
"Other"	after	Annual	Propor-	tion per	Annual	tion	ļ
Securities	Deducting		tion of Bills	Cent. of	A	of	ŀ
after Deduction	Bills Dis- counted and	Average of	Dis-	Bills Dis- counted	Average of	Tempo- rary	Date
Deducting Bills	Temporary	Bills	counted	to Total	Temporary	Advance	Date
Discounted	Advances to		to 1844.	of	Lompormy	to	l
and	the Same in	Discounted.	1844 =	"Other"	Advances.	1844.	1
Temporary	1844.		100.	Securi-	İ	1844 =	1
Advances.	1844 = 100.			ties.		100.	
£		. -		%	£		
5,467,000	100	2,690,000	100	28	1,315,000	100	1844
5,732,000	105	4,680,000	174	38	1,803,000	137	1845
0,,02,000		_,,		3	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
5,788,000	106	9,030,000	334	54	1,843,000	140	1846
5,803,000	106	9,616,000	357	56	1,822,000	139	1847
6,216,000	113	4,289,000	159	35	1,462,000	111	1848
6,655,000	122	2,590,000	96	25	977,000	74	1849
6.540.000	119	2,660,000	99	24	1,848,000	140	1850
7,004,000	128	4,544,000	169	36	1,094,000	83	1851
7,798,000	143	3,020,000	112	27	580,000	44	1852
8,028,000	146	6,137,000	228	41	921,000	70	1853
8,007,000	146	6,086,000	226	41	639,000	48	1854
8,630,000	157	6,004,000	223	20	682,000	52	1855
8,487,000	155	6,700,000	249	39 39	1,880,000	143	1856
9,068,000	166	9,474,000	352	46	1,850,000	141	1857
11,101,000	202	4,620,000	172	28	595,000	45	1858
11,648,000	212	5,570,000	207	30	978,000	74	1859
** 070 000	004	0 001 000	301		1,342,000	102	1860
11,078,000	201	8,091,000 6,586,000	244	39	1,016,000	77	1861
11,136,000	202	6,239,000	232	35	1,541,000	117	1862
11,207,000 10,546,000	192	7,402,000	275	33	2,228,000	169	1863
9,703,000	177	8,600,000	320	37 42	1,993,000	151	1864
0,,00,000		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					l
9,525,000	174	8,601,000	320	42	2,442,000	185	1865
9,778,000	179	9,631,000	358	42	3,553,000	270	1866
10,575,000	193	5,846,000	217	32	1,814,000	138	1867
10,783,000	197	5,030,000	187	28	1,834,000	139	1868
9,165,000	167	5,808,000	216	34	1,849,000	140	1869
8,508,000	155	6,418,000	239	34	3,696,000	281	1870
9,554,000	174	6,411,000	239	34	2,838,000	215	1871
10,622,000	194	6,945,000	258	32	3,899,000	296	1872
10,999,000	201	7,737,000	287	36	2,907,000	220	1873
11,080,000	201	4,665,000	173	25	2,742,000	208	1874
11,429,000	209	4,402,000	164	23	3,332,000	253	1875
	_					_	1876
-	l –	_	_	_		-	1877
_	I —	_	-	l —	_	١ —	1878

TABLE I. Continued—BANK ANNUAL AVERAGES OF THE TRANSACTIONS OF THE

		1				
	27	28	29	30	31	32
	Annual	Proportion	Annual	Proportion	Annual	Proportion
- 1	Average of	per	Average of	per	Average of	of
- 1	Provincial	Cent. of	London	Cent. of	Total	Total
Date	Circulation	Provincial	Circulation	London Cir-	Note Circu-	Circulation
	of Bank	Circulation	of Bank	culation to	lation of	to
	of England	to Total	of England	Total	Bank	1844.
	Notes.	Circulation.	Notes.	Circulation.	of England.	1844=100.
	£	%	£	%	£	
1844	6,510,000	32	13,740,000	68	20,250,000	100
1845	7,130,000	34	13,544,000	66	20,674,000	102
1846	6,770,000	33	13,482,000	67	20,252,000	100
1847	6,530,000	34	12,593,000	66	19,123,000	94
1848	5,830,000	32	12,256,000	68	18,086,000	89
1849	5,900,000	32	12,538,000	68	18,438,000	91
	4 840 000		12 100 000	68	10 449 000	00
1850	6,260,000	32	13,188,000		19,448,000	96
1851	6,420,000	33	13,040,000	67	19,468,000	96
1852	6,940,000	31	14,970,000	69	21,910,000	108
1853	7,810,000	34	14,792,000	66	22,602,000	111
1854	7,380,000	36	13,308,000	64	20,688,000	102
1855	7,040,000	35	12,790,000	65	19,830,000	98
1856	6,970,000	35	12,697,000	65	19,667,000	97
1857	7,000,000	36	12,467,000	64	19,467,000	96
1858	6,880,000	34	13,368,000	66	20,248,000	100
1859	7,660,000	36	13,666,000	64	21,326,000	105
1860	7,910,000	37	13,342,000	63	21,252,000	105
1861	7,390,000	37	12,602,000	63	19,992,000	99
1862	7,480,000	36	13,355,000	64	20,835,000	103
1863	7,440,000	36	13,224,000	64	20,664,000	102
1864	7,570,000	37	13,035,000	63	20,605,000	102
1865	7,720,000	36	13,397,000	64	21,117,000	104
			14,679,000	63	23,159,000	114
1866	8,480,000	37				116
1867	8,610,000	37	14,828,000	63	23,438,000	
1868	8,990,000	38	14,942,000	62	23,932,000	118
1869	8,860,000	38	14,623,000	62	23,483,000	116
1870	8,830,000	38	14,497,000	62	23,327,000	115
1871	9,320,000	38	15,096,000	62	24,416,000	120
1872	9,882,000	39	15,641,000	бі	25,523,000	126
1873	9,999,000	39	15,685,000	61	25,645,000	126
1874	10,154,000	39 38	16,110,000	62	26,264,000	130
1875	10,383,000	38	16,963,000	62	27,346,000	135
1876		3-		_	27,734,000	137
1877		_		_	27,895,000	138
1878	_	_	_	l _	28,058,000	138
2010						1 200

Note.—It was notified on the publication of the Return of the Bank of England for the week ending Wednesday, January 8, 1873, that, with regard to the Deposits in the Return then issued, the practice was commenced of placing the Chancery Balances under the head of Government Deposits instead of under that of the ordinary Deposits of the public as heretofore. The average amount is about £1,000,000, and to that extent, therefore, the respective totals have undergone transposition. This must be borne in mind in comparing the amounts of the Private Deposits from 1844 to 1872, and from 1873 onwards.

OF ENGLAND.

BANK OF ENGLAND FOR THE YEARS 1844-1878.

	NGLAND FOI		ES 1077-107			
33	34	35	36	37	38	1
	Proportion	Proportion	Proport ion	Proportion		l
Annual		per Cent.	~ .	per Cent.	Annual	1
Average of	of Bullion to	of Bullion to	per Cent.	of Bullion to	Average	D-4-
Coin and	1844.	Liabilities	af D-11: am Aa	Deposits and	of Minimum Rate of	Date.
Bullion.	1844.	on Deposits and Bank	or Dunion to	Circulation	Discount.	l
	1844=100.	Post Bills.	Circulation.		Discount.	l
	1071-100.	TOST DIES.				
£	İ	% *	%	%	£ s. d.	
14,664,000	100	*	72	42	2 10 0	1844
15,243,000	10 4	93	74	41	2 13 8	1845
14,785,000	101	70	70	36	3 6 6	1846
10,428,000	71	73 65	73	30	5 3 6	1847
13,872,000	95	22	54	41	3 14 5	1848
		87 88	77 82		2 18 7	1849
15,161,000	103	00	02	42	2 10 7	1010
16,636,000	113	88	86	43	2 10 1	1850
14,564,000	99	82	75	39	3 0 0	1851
20,587,000	140	†	94	49	2 3 0	1852
17,516,000	119	go	78	41	3 13 10	1853
13,997,000	95	89	68	38	5 2 3	1854
			1	1		
14,181,000	97	8o	7 <u>1</u>	38	4 17 10	1855
10,932,000	75	65	56	30	6 1 2	1856
10,118,000	69	57	52 88	27	6 13 3	1857
17,847,000	122	86		43	3 4 7	1858
17,928,000	122	80	84	41	2 14 7	1859
15,239,000	104	73	72	36	4 3 7	1860
13,009,000	89	71	65	34	5 5 4	1861
16,380,000	112		78	38	2 10 7	1862
14,567,000	99	73 66	70	34	4 8 2	1863
13,482,000	92	65	65	33	7 8 0	1864
10,202,000	00	03		33		
14,546,000	99	68	69	34	4 15 4	1865
14,887,000	101	65 .	641	33	6 19 0	1866
21,353,000	145	82	91,	43	2 10 9	1867
20,838,000	142	81 ~	87	42	2 1 11	1868
18,825,000	128	79.,	\$ 80	40	3 4 2	1869
20,776,000	142	70	89	42	3 2 0	1870
23,588,000	161	79 81	96	44	2 17 8	1871
22,585,000	151 154		88	41	4 2 0	1872
22,665,000	154	77 78	88	41	4 15 10	1873
22,005,000 22,294,000	152	87	85	43	3 13 10	1874
<i>22,234</i> ,000	100	٥/	^{دی}	43	3 10 10	10,1
23,923,000	163	- 90	88	44	3 4 8	1875
28,6 95,000	196	93 88	‡	49	2 12 1	1876
25,374,000	173		91	45	2 18 0	1877
23,952,000	<i>163</i>	82	85	42	3 15 8	1878

Note.—During the years 1844-53 the Bank always held a proportion of Silver Bullion This is included in the amounts given in Col. 33 of this Table. The stock of Silver thus held is shown in Table XIV., page 126.

[•] Average of Bullion 21 per cent. more than Liabilities.

[†] Average of Bullion nearly 11 per cent. more than Liabilities.

Average of Bullion 3} per cent. more than Circulation.

CHAPTER II.

THE DEPOSITS HELD BY THE BANK OF ENGLAND, AND THE RESERVE OF THE BANK OF ENGLAND.

WE will now proceed to the examination of the tables. which are drawn up for the purpose of assisting us to form a complete analysis of the accounts of the Bank of The Capital of the Bank of England is the largest of any known bank in the world, and amounts to £14,553,000; the Rest, or accumulated and undivided profit, averages about 3 millions more. capital available belonging to the Bank, without taking the note issue into consideration, is therefore about 174 Col. 9 of Table I. contains the yearly average of the total deposits of the Bank of England. contains the yearly average of the total liabilities of the Bank of England on deposits and Bank post bills. From this point of view we need not take the Bank note circulation into account, as that concerns the Issue Department and not the Banking Department of the Bank of England; the only liabilities, therefore, which have to be taken into consideration besides the deposits are the seven-day and other bills. These have declined From averaging more than £1,000,000 in

1844, they have diminished to less than £300.000 in In consequence, it will be observed that the amounts in col. 1 do not very greatly differ from those in col. 9, for the last ten or twelve years. To render the statement more clear, a column marked 2 has been added, in which the proportion is given which the amounts of the total liabilities under these heads bore to that in 1844. By looking down these columns we shall see that it has not been till within the last eighteen or twenty years that the average deposits of the Bank have exceeded, or much exceeded, its capital; even at the present date the deposits are only about equal to twice the capital. This is a very unusually strong position for any bank to occupy. The capital of most banks bears generally but a comparatively small proportion to the deposits. In Scotland the proportion has of late years been about one-sixth. In England a proportion of an eighth, or even smaller, is not unusual. The position of the Bank of England, therefore, in this respect is unusually and exceptionally strong. During the time under our notice a very considerable increase in the deposits and liabilities of the Bank has taken place. The liabilities, which averaged about 14 millions in 1844, averaged more than 29 millions in 1878, having thus doubled in the course of that time: and this growth, as will be seen by a reference to the table, has been gradual and continued. In a similar manner, though not in a like proportion, the average; reserve has increased. The annual average of the reserve, with a statement of the proportion each year bears to 1844, will be found in cols. 13 and 14. The average reserve, from being 81 millions in 1844, has increased to 11 millions in 1878. In col. 15 is given the average proportion of reserve to the liabilities on deposits and Bank post bills. This is generally very considerable. It has been as high as 63 per cent. in 1852; it was as low as 30 per cent. in 1866. It rose in the next year to 49 per cent., and has never averaged less than 41 per cent. since, till 1878, when the proportion was only 37 per cent. In looking down col. 15,

a distinct, though gradual, diminution in the proportion of the reserve to the liabilities becomes obvious. And it is not only the proportion which has diminished; the character of the demands which may be made upon the reserve has, during the last twenty-five years, undergone a great, though a gradual alteration. This has been caused by the great increase in the balances which other bankers have kept with the Bank of England. The returns on which this analysis is based contain a statement of the balances which the London bankers have kept with the Bank of England. We will now proceed to consider the amounts of these balances, and the proportion which they bear to the

banking reserve.

Col. 11 contains the annual average of the London bankers' balances. In these there is a very considerable and progressive increase, far larger than the increase in the reserve itself. That there had been a great increase of late years was a matter of conjecture, but the particulars are not given in the weekly statements; and it is only the annual return which supplies this valuable information. The average amount, which was less than 1 million in 1844, had become more than 91 millions in 1877, the latest date to which the information can at present be given. By the balances of "the London bankers," it is understood that the balances of "the clearing bankers" are described. There are, therefore, doubtless other amounts than these belonging to bankers, and really forming a portion of the general reserve of bankers in the aggregate on deposit with the Bank. There are now many important banks located in the metropolis, besides the London banks properly so called. There are Scotch banks, Irish banks, colonial banks, foreign banks, all doing large businesses in London, and doubtless keeping corresponding sums of money in reserve. There are also large sums of money doubtless kept with the branches of the Bank of England at Manchester, at Liverpool, and elsewhere, by provincial banks, which often do business on a large scale, quite comparable with that of many London

banks. These sums are all, properly speaking," bankers' balances," and the amount being kept for the same purpose, should be included in the same statement. But we can only deal with the figures as stated in the published returns. The increase of the figures is progressive, and proceeds in a far more rapid proportion than the increase of the reserve of the Bank of England itself, or of any other branch of its business. Col. 12 contains the proportion which the balances of the London bankers bore during each year to their amount in 1844, and enables us to follow their fluctuations with facility. In col. 17 the proportion per cent. of the average bankers' balances to the reserve is given. From being only 11 per cent. of the total reserve in 1844, the proportion increased to 93 per cent. in 1866; and, though it has not always remained at that high figure, in 1877 it was 77 per cent. Thus, from being but a small fraction of the reserve in the early years over which the table extends, the amount has increased to being fully three-quarters of the average reserve at the present time. It is the practice of the London banks to keep their principal reserve against immediate demands with the Bank of England, as being the easiest and And as their business has extended, so safest plan. they have also increased the amounts on deposit with the Bank of England. As far as the connection between the two can be traced, it appears that the amounts of the bankers' balances (the bankers' reserves) are somewhat larger now in proportion to their liabilities than they were twenty-five years ago; while the reserve of the Bank of England itself is somewhat smaller. doubt a very considerable portion of the increase in the balances of the London bankers is due to the necessity of holding larger sums at the Bank of England, consequent on the improvements in the Clearing House system, and the admission of the principal London joint stock banks to that establishment, arranged in the years 1853 and 1854. The effect of those alterations may be traced in the diminution of the metropolitan note circulation of the Bank of England. The circulation, as

distinguished between that issued in London and the provinces, is given in cols. 27 and 29 of this table. A distinct diminution in the metropolitan circulation is observable at the date just named. And from that date also the proportion borne by the balances of the London bankers to the reserve of the Bank of England, which had not ever previously exceeded 20 per cent. of that reserve, rises, till, as previously mentioned, in recent years it became usually about three-quarters of the reserve.

The enormous amounts which pass through the Clearing House, especially on Stock Exchange "settling days," when totals of 30 millions, 40 millions, and occasionally larger sums still are cleared, leave very large balances to be adjusted through the "clearing bankers'" account with the Bank of England. Due preparation has to be made to meet these balances, and very large amounts are required on these occasions.

What is paid away by one bank, however, in this

manner is received by another. The "money" remains equally with the Bank of England, whether it stands to the credit of one bank or of another bank. the amounts held on deposit by the bankers in London into consideration, and the demands which may be made on them on that account, it would appear that the balances which they keep with the Bank of England rather represent what should, with strictest accuracy, be called their "Till Money" than their "Reserve." Money," as every one concerned in business knows, is the amount which every banker is bound to keep close at hand ready to meet the calls of the moment. It is. indispensable to the proper conduct of a business, but it cannot be looked on as a "Reserve." A reserve, though equally needed to meet immediate calls, must be on a far larger scale than the mere amount of cash necessarily held in this manner. And taking into consideration, as just mentioned, the vast amounts of deposits with the bankers in London, and the demands which

may be made on them at any time, the balances they keep with the Bank of England must be considered

rather as the cash they need for immediate requirements, transferred for convenience sake to the custody of the Bank of England, than a really available banking reserve.

The growth and development of the London bankers' balances will be more clearly shown if we divide the period from 1846 to 1877, into four groups of eight years each. The averages are then as follows:—

		•	Proportion per Cent. of Reserve to Liabilities.	Proportion per Cent. of Bankers' Balances to Reserve.
Averages o	f the yes	rs 1846-53	 52	. 21
, ,,	,,	1854-61	 43 / 1	45
,,	,,	1862-69	 42 7	60 🗸
		1870-77	 4 7 7	70

In the earliest group, the proportion of the reserve was more than half the liabilities. This proportion, it will be seen on the whole, declines, while the proportion which the balances of the London bankers bear to the banking reserve itself, steadily increases. As the balances of the London bankers kept with the Bank of England are included among the total deposits of the Bank, it becomes clear how very considerable a part of the increase of those deposits is due to this source. general effect may be traced by comparing the amounts in col. 9 with those in col. 11. It might be thought that these deposits are exactly those which are the most certain to diminish in times of pressure, but, on the contrary, they are certain to rise at such a time. Thus they greatly increased during the panics of 1857 and 1866. Between the 4th and the 25th of November, 1857, the bankers' balances increased 2 millions; from £3,400,000 on the 4th November, to £5,400,000 on the 25th November. In 1866, the action of the bankers was more rapid. On the 9th May, 1866, their balances were £5,000,000; by the 16th they had increased nearly 3 millions, the figures being £7,900,000. Beyond doubt, a great portion of these sums had been derived from the Bank of England itself, as the temporary ad-

TABLE I. Continued—BANK.

ANNUAL AVERAGES OF THE TRANSACTIONS OF THE

	13	14	15	16	17	18	19
Date	Annual Average Reserve of Bank of England.	Proportion of Reserve to 1844. 1844 = 100.	to Lia- bilities on Deposits and Bank	after Deducting Bankers' Balances	tion per Cent. of London Bankers' Balances to	Annual Average of Other Securities.	Proportion of Other Securities to 1844. 1844 = 100.
	£		%	%	%	£	
1844	8,500,000	100	59	56	11	9,472,000	100
1845	8,516,000	100	52	48	15	12,215,000	129
1846	8,539,000	100	42	37	18	16,661,000	176
1847	5,291,000	62	33	26	27	17,241,000	182
1848	9,784,000	115	61	54	24	11,967,000	126
1849		126	62	57	20	10,222,000	108
1850	11,219,000	132	59	55	15	11,048,000	116
1851	9,103,000	107	52	46	18	12,642,000	133
1852	12,764,000	150	63	56	25	11,398,000	120
1853	8,907,000	103	46	38	25	15,086,000	159
1854	7,290,000	86	46	35	37	14,732,000	155
1855	8,366,000	98	47	36	37	15,316,000	162
1856		68	34	19	52	17,067,000	180
1857	5,347,000	63	30	14	бі	20,392,000	215
1858		141	58	45	39	16,316,000	172
1859	11,076,000	129	49	37	39	18,196,000	192
1860	8,451,000	99	40	25	51	20,511,000	216
1861	7,611,000	89	41	24	55	18,738,000	198
1862	10,194,000	120 -	45	29	45	18,987,000	200
1863	8,536,000	100	39	22	55 66	20,176,000	212
1864	7,478,000	88	36	16	66	20,296,000	214
1865	8,089,000	95	38	19	63	20,568,000	217
1866		79	30	3	93	22,962,000	242
1867		152	49	32	52	18,235,000	192
1868		140	46	27	57	17,647,000	186
1869	10,320,000	121	43	22	62	16,822,000	178
1870	12,435,000	146	47	29	53	18,622,000	197
1871	14,162,000	166	48	28	59	18,803,000	198
1872	12,122,000	141	41	21	63	21,466,000	226
1873		141	41	17	71	21,643,000	22 9
1874	11,035,000	129	43	15	75	18,487,000	195
1875	11,597,000	136	43	6	89	19,163,000	202
1876		187	52	22	74	17,502,000	185
1877	12,478,000	146	43	15	77	18,861,000	200
1878	10,879,000	127	37			20,424,000	215

OF ENGLAND.

BANK OF ENGLAND FOR THE YEARS 1844-1878.

-						,		
	20	21	22	23	24	25	26	
		Proportion	!		1		i	ł
	Annual	of "Other"	l		.		<u> </u>	l
	Average of "Other"	Securities	A	Danner	Propor-	A	Propor-	1
	Securities	after Deducting	Annual	Propor- tion of	tion per Cent. of	Annual	tion of	l
	after	Bills Dis-	Average of	Bills	Bills Dis-	Average of		1
	Deducting	counted and	Average or	Dis-	counted	TAGE WE OF	rary	Date
	Bills	Temporary	Bills	counted	to Total	Temporary	Advance	
	Discounted	Advances to		to 1844.	of		to	İ
	and		Discounted.	1844 =	"Other"	Advances.	1844.	l
	Temporary	1844.		100.	Securi-		1844 =	l
	Advances.	1844 = 100.		ļ	ties.		100.	1
-								
	£		£ -	İ	%	£	l	l
	5,467,000	100	2,690,000	100	28	1,315,000	100	1844
	5,732,000	105	4,680,000	174	38	1,803,000	137	1845
				ł	"		İ	1
	5,788,000	106	9,030,000	334	54	1,843,000	140	1846
	5,803,000	106	9,616,000	357	56	1,822,000	139	1847
	6,216,000	113	4,289,000	159	35	1,462,000	111	1848
	6,655,000	122	2,590,000	96	25	977,000	74	1849
	6,540, 000	119	2,660,000	99	24	1,848,000	140	1850
	7,004,000	128	4,544,000	169	36	1,094,000	83	1851
	7,798,000	143	3,020,000	112	27	580,000	44	1852
	8,028,000	146	6,137,000	228	41	921,000	70	1853
	8,007,000	146	6,086,000	226	4I	639,000	4 8	1854
	8,630,000	157	6,004,000	223	39	682,000	52	1855
	8,487,000	155	6,700,000	249	39	1.880.000	143	1856
	9,068,000	166	9,474,000	352	46	1,850,000	141	1857
	11,101,000	202	4,620,000	172	28	595,000	45	1858
	11,648,000	212	5,570,000	207	30	978,000	74	1859
	11,020,000	~1~	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	~~.	30	0,0,000		
	11,078,000	201	8,091,000	301	39	1,342,000	102	1860
	11,136,000	202	6,586,000	244	35	1,016,000	77	1861
	11,207,000	205	6,239,000	232	33	1,541,000	117	1862
	10,546,000	192	7,402,000	275	37	2,228,000	169	1863
	9,703,000	177	8,600,000	32 0	42	1,993,000	151	1864
	0 505 000	1 1 1	0.001.000	200		0.440.000	10*	1000
	9,525,000	174	8,601,000	320	42	2,442,000	185	1865
	9,778,000	179	9,631,000	358	42	3,553,000	270	1866
	10,575,000	193	5,846,000	217	32	1,814,000	138	1867
	10,783,000	197	5,030,000	187	28	1,834,000	139	1868
	9,165,000	167	5,808,000	216	34	1,849,000	140	1869
	8,508,000	155	6,418,000	239	34	3,696,000	281	1870
	9,554,000	174	6,411,000	239	34	2,838,000	215	1871
	10,622,000	194	6,945,000	258	32	3,899,000	296	1872
	10,999,000	201	7,737,000	287	36	2,907,000		1873
	11,080,000	201	4,665,000	173	25	2,742,000		1874
						, ,		
	11,429,000	209	4,402,000	164	23	3,332,000	253	1875
	_	- 1	_	-	-	-		1876
	-	_		-	-			1877
_								1878
•								

TABLE I. Continued—BANK
ANNUAL AVERAGES OF THE TRANSACTIONS OF THE

		1		,		
- 1	27	28	29	30	31	32
- 1	Annual	Proportion	Annual	Proportion	Annual	Proportion
- 1	Average of	per	Average of	per	Average of	of
!	Provincial	Cent. of	London	Cent. of	Total	Total
Date	Circulation	Provincial	Circulation	London Cir-	Note Circu-	Circulation
	of Bank	Circulation	of Bank	culation to Total	lation of Bank	to 1844.
	of England	to Total Circulation.	of England Notes.	Circulation.		1844=100.
	Notes.	Circulation.	Notes.	Circulation.	or England.	1044-100.
	£	%	£	8	£	
1844	6,510,000	32	13,740,000	68	20,250,000	100
1845	7,130,000	34	13,544,000	66	20,674,000	102
1846	6,770,000	33	13,482,000	67	20,252,000	100
1847	6,530,000	34	12,593,000	66	19,123,000	94
1848	5,830,000	32	12,256,000	68	18,086,000	89
1849	5,900,000	32	12,538,000	68	18,438,000	91
1850	6,260,000	32	13,188,000	68	19,448,000	96
1851	6,420,000	33	13,040,000	67	19,468,000	96
1852	6,940,000	31	14,970,000	69	21,910,000	108
1853	7,810,000	34	14,792,000	66	22,602,000	111
1854	7,380,000	36	13,308,000	64	20,688,000	102
1855	7,040,000	35	12,790,000	65	19,830,000	98
1856	6,970,000	35	12,697,000	65	19,667,000	97
1857	7,000,000	36	12,467,000	64	19,467,000	96
1858	6,880,000	34	13,368,000	66	20,248,000	100
1859	7,660,000	36	13,666,000	64	21,326,000	105
1860	7,910,000	37	13,342,000	63	21,252,000	105
1861	7,390,000	37	12,602,000	63	19,992,000	99
1862	7,480,000	36	13,355,000	64	20,835,000	103
1863	7,440,000	36	13,224,000	64	20,664,000	102
1864	7,570,000	37	13,035,000	63	20,605,000	102
1865	7,720,000	36	13,397,000	64	21,117,000	104
1866	8,480,000	37	14,679,000	63	23,159,000	114
1867	8,610,000	37	14,828,000	63	23,438,000	116
1868	8,990,000	38	14,942,000	62	23,932,000	118
1869	8,860,000	38	14,623,000	62	23,483,000	116
1870	8,830,000	38	14,497,000	62	23,327,000	115
1871	9,320,000	38	15.096.000	62	24,416,000	120
1872	9,882,000	39	15,641,000	61	25,523,000	126
1873	9,999,000	39	15,685,000	61	25,645,000	126
1874	10,154,000	39	16,110,000	62	26,264,000	130
1075	10.000.000		16,963,000	60	97 946 000	195
1875	10,383,000	38	10,900,000	62	27,346,000	135 137
1876	_	_		_	27,734,000	137
1877		_			27,895,000 28,058,000	138
1878			<u> </u>		1 20,000,000	100

Nore.—It was notified on the publication of the Return of the Bank of England for the week ending Wednesday, January 8, 1873, that, with regard to the Deposits in the Return then issued, the practice was commenced of placing the Chancery Balances under the head of Government Deposits instead of under that of the ordinary Deposits of the public as heretore. The average amount is about £1,000,000, and to that extent, therefore, the respective totals have undergone transposition. This must be borne in mind in comparing the amounts of the Private Deposits from 1844 to 1872, and from 1873 onwards.

OF ENGLAND.

BANK OF ENGLAND FOR THE YEARS 1844-1878.

33	34	35	36	37	38	
	Proportion	Proportion	Proportion	Proportion		1
Annual	l	per Cent.	٠	per Cent.	Annual	1
Average of	of Bullion to	of Bullion to	per Cent.	of Bullion to Liabilities on	Average	Data
Coin and	1844.	Liabilities	of Bullion to	Deposits and	Rate of	Date.
Bullion.	1044.	and Bank	or purnon to	Circulation	Discount.	l
	1844=100.	Post Bills.	Circulation.		Discount.	Ì
£		%	%	%	£ s. d.	
14,664,000	100	*	72	42	2 10 0	1844
15,243,000	104	93	74	41	2 13 8	1845
14,785,000	101	73	73	36	3 6 6	1846
10,428,000	71	73 65	54	30	5 3 6	1847
13,872,000	95	87	77	41	3 14 5	1848
15,161,000	103	88	77 82	42	2 18 7	1849
16,636,000	113	88	86	43	2 10 1	1850
14,564,000	99	82	7 5	39	3 0 0	1851
20,587,000	140	†	94	49	2 3 0	1852
17,516,000	119	90	78	41	8 13 10	1853
13,997,000	95	89	68	38	5 2 3	1854
14,181,000	97	8o	71	38	4 17 10	1855
10,932,000	75	65	56	30	6 1 2	1856
10,118,000	69	57 86	52 88	27	6 13 3	1857
17,847,000	122			43	3 4 7	1858
17,928,000	122	80	84	41	2 14 7	1859
15,239,000	104	73	72	36	4 3 7	1860
13,009,000	89	71	72 65	34	5 5 4	1861
16,380,000	112		78	38	2 10 7	1862
14,567,000	99	73 66	70	34	4 8 2	1863
13,482,000	92	65	65	33	780	1864
14,546,000	99	68	69	34	4 15 4	1865
14,887,000	101	65 .	64;	33	6 19 0	1866
21,353,000	145	82	91,	43	2 10 9	1867
20,838,000	142	81	87	42	2 1 11	1868
18,825,000	128	79.,	\$ 80	40	3 4 2	1869
20,776,000	142	79 81	89	42	3 2 0	1870
23,588,000	161		96	44	2 17 8	1871
22,5 85,000	154	77 78	88	41	4 2 0	1872
22,665,000	154	78	88	41	4 15 10	1873
22,294,000	152	87	85	43	3 13 10	1874
23,923,000	163	- 90	88	44	3 4 8	1875
28,695,000	196	93 88	‡	49	2 12 1	1876
25,374,000	173		91	45	2 18 0	1877
23,952,000	163	82	85	42	3 15 8	1878

Note.—During the years 1844-53 the Bank always held a proportion of Silver Bullion This is included in the amounts given in Col. 33 of this Table. The stock of Silver thus held is shown in Table XIV., page 126.

[•] Average of Bullion 21 per cent. more than Liabilities.

[†] Average of Bullion nearly 14 per cent. more than Liabilities.

Average of Bullion 31 per cent. more than Circulation.

CHAPTER II.

THE DEPOSITS HELD BY THE BANK OF ENGLAND, AND THE RESERVE OF THE BANK OF ENGLAND.

WE will now proceed to the examination of the tables, which are drawn up for the purpose of assisting us to form a complete analysis of the accounts of the Bank of The Capital of the Bank of England is the England. largest of any known bank in the world, and amounts to £14,553,000; the Rest, or accumulated and undivided profit, averages about 3 millions more. capital available belonging to the Bank, without taking the note issue into consideration, is therefore about 174 Col. 9 of Table I. contains the yearly average of the total deposits of the Bank of England. Col. 1 contains the yearly average of the total liabilities of the Bank of England on deposits and Bank post bills. From this point of view we need not take the Bank note circulation into account, as that concerns the Issue Department and not the Banking Department of the Bank of England; the only liabilities, therefore, which have to be taken into consideration besides the deposits are the seven-day and other bills. These have declined From averaging more than £1,000,000 in recently.

1844, they have diminished to less than £300,000 in 1878. In consequence, it will be observed that the amounts in col. 1 do not very greatly differ from those in col. 9, for the last ten or twelve years. To render the statement more clear, a column marked 2 has been added, in which the proportion is given which the amounts of the total liabilities under these heads bore to that in 1844. By looking down these columns we shall see that it has not been till within the last eighteen or twenty years that the average deposits of the Bank have exceeded, or much exceeded, its capital: even at the present date the deposits are only about equal to twice the capital. This is a very unusually strong position for any bank to occupy. The capital of most banks bears generally but a comparatively small proportion to the deposits. In Scotland the proportion has of late years been about one-sixth. In England a proportion of an eighth, or even smaller, is not unusual. The position of the Bank of England, therefore, in this respect is unusually and exceptionally strong. During the time under our notice a very considerable increase in the deposits and liabilities of the Bank has taken place. The liabilities, which averaged about 141 mil-1844, averaged more than 29 millions in 1878, having thus doubled in the course of that time; and this growth, as will be seen by a reference to the table, has been gradual and continued. In a similar manner, though not in a like proportion, the average reserve has increased. The annual average of the reserve, with a statement of the proportion each year bears to 1844, will be found in cols. 13 and 14. The average reserve, from being 8½ millions in 1844, has increased to 11 millions in 1878. In col. 15 is given the average proportion of reserve to the liabilities on deposits and Bank post bills. This is generally very considerable. It has been as high as 63 per cent. in 1852; it was as low as 30 per cent. in 1866. It rose in the next year to 49 per cent., and has never averaged less than 41 per cent. since, till 1878, when the proportion was only 37 per cent. In looking down col. 15,

a distinct, though gradual, diminution in the proportion of the reserve to the liabilities becomes obvious. And it is not only the proportion which has diminished; the character of the demands which may be made upon the reserve has, during the last twenty-five years, undergone a great, though a gradual alteration. This has been caused by the great increase in the balances which other bankers have kept with the Bank of England. The returns on which this analysis is based contain a statement of the balances which the London bankers have kept with the Bank of England. We will now proceed to consider the amounts of these balances, and the proportion which they bear to the

banking reserve. Col. 11 contains the annual average of the London bankers' balances. In these there is a very considerable and progressive increase, far larger than the increase in the reserve itself. That there had been a great increase of late years was a matter of conjecture, but the particulars are not given in the weekly statements; and it is only the annual return which supplies this valuable information. The average amount, which was less than 1 million in 1844, had become more than 91 millions in 1877, the latest date to which the information can at present be given. By the balances of "the London bankers," it is understood that the balances of "the clearing bankers" are described. There are, therefore, doubtless other amounts than these belonging to bankers, and really forming a portion of the general reserve of bankers in the aggregate on deposit with the There are now many important banks located in the metropolis, besides the London banks properly so called. There are Scotch banks, Irish banks, colonial banks, foreign banks, all doing large businesses in London, and doubtless keeping corresponding sums of money in reserve. There are also large sums of money doubtless kept with the branches of the Bank of England at Manchester, at Liverpool, and elsewhere, by provincial banks, which often do business on a large scale, quite comparable with that of many London

banks. These sums are all, properly speaking, "bankers' balances," and the amount being kept for the same purpose, should be included in the same statement. But we can only deal with the figures as stated in the published returns. The increase of the figures is progressive, and proceeds in a far more rapid proportion than the increase of the reserve of the Bank of England itself, or of any other branch of its business. Col. 12 contains the proportion which the balances of the London bankers bore during each year to their amount in 1844, and enables us to follow their fluctuations with facility. In col. 17 the proportion per cent. of the average bankers' balances to the reserve is given. From being only 11 per cent. of the total reserve in 1844, the proportion increased to 93 per cent. in 1866; and, though it has not always remained at that high figure, in 1877 it was 77 per cent. Thus, from being but a small fraction of the reserve in the early years over which the table extends, the amount has increased to being fully three-quarters of the average reserve at the present It is the practice of the London banks to keep their principal reserve against immediate demands with the Bank of England, as being the easiest and safest plan. And as their business has extended, so they have also increased the amounts on deposit with the Bank of England. As far as the connection between the two can be traced, it appears that the amounts of the bankers' balances (the bankers' reserves) are somewhat larger now in proportion to their liabilities than they were twenty-five years ago; while the reserve of the Bank of England itself is somewhat smaller. doubt a very considerable portion of the increase in the balances of the London bankers is due to the necessity of holding larger sums at the Bank of England, consequent on the improvements in the Clearing House system, and the admission of the principal London joint stock banks to that establishment, arranged in the years 1853 and 1854. The effect of those alterations may be traced in the diminution of the metropolitan note circulation of the Bank of England. The circulation, as

distinguished between that issued in London and the provinces, is given in cols. 27 and 29 of this table. A distinct diminution in the metropolitan circulation is observable at the date just named. And from that date also the proportion borne by the balances of the London bankers to the reserve of the Bank of England, which had not ever previously exceeded 20 per cent. of that reserve, rises, till, as previously mentioned, in recent years it became usually about three-quarters of the reserve.

The enormous amounts which pass through the Clearing House, especially on Stock Exchange "settling days," when totals of 30 millions, 40 millions, and occasionally larger sums still are cleared, leave very large balances to be adjusted through the "clearing bankers" account with the Bank of England. Due preparation has to be made to meet these balances, and very large

amounts are required on these occasions.

What is paid away by one bank, however, in this manner is received by another. The "money" remains equally with the Bank of England, whether it stands to the credit of one bank or of another bank. Taking the amounts held on deposit by the bankers in London into consideration, and the demands which may be made on them on that account, it would appear that the balances which they keep with the Bank of England rather represent what should, with strictest accuracy, be called their "Till Money" than their "Reserve." Money," as every one concerned in business knows, is the amount which every banker is bound to keep close at hand ready to meet the calls of the moment. It is. indispensable to the proper conduct of a business, but it cannot be looked on as a "Reserve." A reserve, though equally needed to meet immediate calls, must be on a far larger scale than the mere amount of cash necessarily held in this manner. And taking into consideration, as just mentioned, the vast amounts of deposits with the bankers in London, and the demands which may be made on them at any time, the balances they keep with the Bank of England must be considered

rather as the cash they need for immediate requirements, transferred for convenience sake to the custody of the Bank of England, than a really available banking reserve.

The growth and development of the London bankers' balances will be more clearly shown if we divide the period from 1846 to 1877, into four groups of eight years each. The averages are then as follows:—

		·	Proportion per Cent. of Reserve to Liabilities.	Proportion per Cent. of Bankers' Balances to Reserve.
Averages o	f the yea	rs 1846-53	 52	. 21
, ,,	,,	1854-61	 43 / 1	45
,,	,,	1862-69	 42 3	60 🗸
29	,,	1870-77	 45 🔻 '	70

In the earliest group, the proportion of the reserve was more than half the liabilities. This proportion, it will be seen on the whole, declines, while the proportion which the balances of the London bankers bear to the banking reserve itself, steadily increases. As the balances of the London bankers kept with the Bank of England are included among the total deposits of the Bank, it becomes clear how very considerable a part of the increase of those deposits is due to this source. general effect may be traced by comparing the amounts in col. 9 with those in col. 11. It might be thought that these deposits are exactly those which are the most certain to diminish in times of pressure, but, on the contrary, they are certain to rise at such a time. Thus they greatly increased during the panics of 1857 and 1866. Between the 4th and the 25th of November. 1857, the bankers' balances increased 2 millions; from £3,400,000 on the 4th November, to £5,400,000 on the 25th November. In 1866, the action of the bankers was more rapid. On the 9th May, 1866, their balances were £5,000,000; by the 16th they had increased nearly 3 millions, the figures being £7,900,000. Beyond doubt, a great portion of these sums had been derived from the Bank of England itself, as the temporary advances during that time increased nearly 5 millions, and the amount of bills discounted also increased to about the same extent. The reserve of the Bank of England had diminished during the same time, from the 9th to the 16th May, more than 4 millions, from £4,900,000 on the earlier date, to £700,000 on the later. A great portion of that amount had undoubtedly been drawn by the London bankers. The immediate response to the call of necessity speaks very well for the manner in which the reserves of money at short dates were placed, for the prudence with which the banking business of the country generally was carried on, and also for the liberality shown by the Bank at a period of great national peril.

A more recent instance of the manner in which the balances of the London bankers become augmented in any time of anxiety was shown in the year 1875. On May 31st in that year the failure of Messrs. Sanderson and Co., the Discount Brokers, of Lombard Street, was announced simultaneously with that of the Aberdare and Plymouth Iron Companies, some anxiety having existed for a short time previous; and on June 15th the bankruptcy of Messrs. A. Collie and Co. took place, accompanied with the downfall of a host of minor traders

who were involved in their ruin.

The influence of these events on the balances of the London bankers was very remarkable. The particulars are as follows:—

BALANCES OF LONDON BANKERS WITH BANK OF ENGLAND.

1875.		£
May 5		7,072,000
12		
		7,274,000
		10,017,000
June 2		11,857,000
9	•••••	10,497,000
16		9,902,000
23	••••••	12,399,000

A very great rise also took place in the "other" deposits of the Bank of England in October, 1878. On the 2nd of that month the stoppage of the City of Glasgow Bank was announced. The movement in the

"other" deposits of the Bank, consequent on this event, was as follows:—

OTHER DEPOSITS OF THE BANK OF ENGLAND.

1878.		£
September	25	20,087,459
October	2	21,938,505
	9	25,967,071
	16	27,321,433
	23	27,859,388

A large portion of this increase was attributed at the time to the bankers' accounts. Certain information at the moment would have been very valuable, as tending to allay needless alarm. Suitable precautions against danger sometimes prevent that danger from taking place, and on such occasions it is very desirable that the extent of the precautions taken should be known.

A table follows this chapter, giving the averages of the liabilities in the Banking Department and the reserve of the Bank of England, month by month, for the years 1844-1878. On an average, it will be seen that the liabilities have been during that period at their lowest point in the month of November, and that the proportion of the reserve to the liabilities has been at the lowest point during the months of October and December. The proportions of the monthly fluctuations during each year are also interesting. They retrace to a great extent the financial history of each year.

TABLE II.—Monthly Averages of Liabilities and Reserve of Bank of England from 1845 to 1878, Showing the Proportion of

		184	5.		
	Liabilities, Average of Year, £16,367,500.	Average Liabilities of Year = 100.	Reserve, Average of Year, £8,516,583.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities 52 per Cent.
	£		£		
January	13,989,000	85	8,400,000	99	60
February	14,734,000	90	8,991,000	106	61
March	17,769,000	109	10,219,000	120	57
April	16,526,000	101	8,958,000	105	54
May	15,574,000	95	9,294,000	109	60
June	17,890,000	109	10,352,000	122	58
July	15,984,000	98	8,814,000	103	55
August	15,297,000	93	8,323,000	98	54
September	16,957,000	- 103	8,795,000	103	52
October	16,523,000	101	6,767,000	79	41
November	16,397,000	100	6,182,000	73	38
December	18,770,000	115	7,104,000	83	38
		184	6.		
	Liabilities,	Average	Reserve,	Average	Proportion
,	Average of	Liabilities of	Average of	Reserve of	of Reserve
	Year,	Year	Year,	Year	to Liabilities
	£20,262,416.	= 100.	£8,539,416.	= 100.	42 per Cent.
-	£		£		
January	18,927,000	93	6,243,000	73	33
February	25,184,000	124	7,390,000	87	29
March	25,274,000	125	8,462,000	99	34
April	22,644,000	112	7,371,000	86	33
May	21,201,000	104	7,986,000	94	38
June	23,146,000	114	9,906,000	117	43
July	20,229,000	100	9,229,000	108	46
August	17,894,000	88	9,619,000	113	54
September	17,721,000	87	10,201,000	119	58
October	16,480,000	81	8,186,000	96	50
November	16,168,000	80	8,491,000	100	53
December	18,281,000	90	9,389,000	110	51
		184	7.		
	Liabilities,	Average	Reserve,	Average	Proportion
	Average of	Liabilities of	Average of	Reserve of	of Reserve
	Year,	Year	Year,	Year	to Liabilities
	£15,973,250.	= 100.	£5,291,583.	= 100.	33 per Cent.
	£		£		
January	16,566,000	103	7,387,000	140	45
February	15,486,000	97	6,673,000	126	43
March	16,972,000	106	6,067,000	114	36
April	15,062,000	94	3,581,000	68	24
May	14,072,000	88	4,587,000	87	32
June	17,774,000	111	6,263,000	118	35
July	15,052,000	94	5,033,000	95	33
August	14,654,000	91	4,803,000	91	33
September	16,455,000	103	4,869,000	92	30
October	16,011,000	100	2,780,000	53	17
November	15,683,000	98	3,956,000	75	25
December	17,792,000	111	7,500,000	142	42

TABLE II. Continued-Monthly Averages of Liabilities and RESERVE OF BANK OF ENGLAND.

1848.							
	Liabilities, Average of Year, £15,963,333.	Average Liabilities of Year = 100.	Reserve, Average of Year, £9,784,583.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities 61 per Cent.		
	£		£				
January	16,593,000	104	8,107,000	83	49		
February		103	9,859,000	101	60		
March	17,303,000	108	11,286,000	115	65		
April	16,098,000	101	9,563,000	98	59		
May	14,433,000	90	8,988,000	92	62		
June	15,914,000	100	10,400,000	106	65		
July	15,628,000	98	9,557,000	98	61		
August	14,297,000	89	9,086,000	93	63		
September		99	10,010,000	102	63		
October	15,393,000	96	9,038,000	92	59		
November	15,842,000	99	9,820,000	100	62		
December		112	11,701,000	120	65		

1010.							
	Liabilities, Average of Year, £17,211,583.	Average Liabilities of Year = 100.	Reserve, Average of Year, £10,694,250.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities, 62 per Cent.		
	£		£				
January	17,066,000	99	10,807,000	101	63		
February	16,808,000	97	10,885,000	102	65		
March	17,830,000	103	11,346,000	106	64		
April	16,574,000	96	9,749,000	91	59		
May	15,893,000	92	9,495,000	89	60		
June	17,217,000	100	10,818,000	101	63		
July	15,890,000	92	9,546,000	89	60		
August	15,954,000	93	9,753,000	91	61		
September	17,809,000	103	11,013,000	103	62		
October	17,497,000	102	10,472,000	98	60		
November	17,846,000	104	11,559,000	108	65		
December	20,155,000	117	12,888,000	120	64		

	Liabilities, Average of Year, £18,822,083.	Average Liabilities of Year = 100.	Reserve, Average of Year, £11,219,750.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities 60 per Cent.
Tanana	£ 18,710,000	99	£ 11,763,000	105	63
January February		95	11,688,000	104	65
March		104	12,195,000	109	62
April	17,733,000	94	10,729,000	95	60
May	17,367,000	92	10,988,000	98	63
June	19,185,000	102	11,695,000	104	61
July	17,911,000	95	10,601,000	94	59
August	17,948,000	96	10,822,000	96	60
September	20,112,000	107	11,600,000	103	58
October	18,888,000	100	10,504,000	93	56
November	19,402,000	103	11,045,000	98	57
December	20,911,000	111	11,007,000	98	52

TABLE II. Continued—Monthly Averages of Liabilities and Reserve of Bank of England.

1851.						
	Liabilities, Average of Year, £17,638,583.	Average Liabilities of Year = 100.	Reserve, Average of Year, £9,103,833.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities 51 per Cent.	
	£		£			
January	18,854,000	107	9,017,000	99	48	
February		99	9,276,000	102	53	
March	18,671,000	106	9,498,000	104	51	
April	16,534,000	94	7,850,000	86	47	
May	16,181,000	92	8,093,000	89	50	
June	18,167,000	103	9,029,000	99	50	
July	16,007,000	91	7,755,000	85	48	
August		92	8,105,000	89	50	
September		104	9,456,000	104	51	
October	18,251,000	103	8,981,000	99	49	
November	17,411,000	99	9,929,000	109	57	
December	19,357,000	110	12,257,000	135	63	

1859

1892.							
	Liabilities, Average of Year, £20,149,000.	Average Liabilities of Year = 100.	Reserve, Average of Year, £12,764,500.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities, 63 per Cent.		
Топпонт	£ 18,497,000	92	£ 11,401,000	89	61		
January February	19,112,000	95	12,324,000	97	65		
March	20,598,000	102	13,510,000	106	66		
April		95	12,135,000	95	63		
May	,	96	12,691,000	99	65		
June		104	13,938,000	109	66		
July		100	12,823,000	100	64		
August		98	12,953,000	101	66		
September	21,151,000	105	13,765,000	108	65		
October	20,357,000	101	12,443,000	97	61		
November	20,204,000	100	12,318,000	96	61		
December	22,334,000	111	12,873,000	101	58		

	Liabilities, Average of Year, £19,543,166.	Average Liabilities of Year = 100.	Reserve, Average of Year, £8,907,750.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities, 46 per Cent.
-	£	400	£	-	
January		108	10,271,000	115	49
February		103	10,135,000	113	50
March		123	11,238,000	126	47
April	19,771,000	101	9,725,000	109	49
May	18,579,000	95	9,146,000	102	49
June	19,079,000	97	9,550,000	107	50
July	17,683,000	90	8,577,000	96	49
August	16,998,000	87	8,119,000	91	48
September	18,051,000	92	7,806,000	88	43
October	18,375,000	94	6,090,000	68	33
November	18,602,000	95	7,675,000	86	41
December	22,208,000	114	8,561,000	96	38

TABLE II. Continued—Monthly Averages of Liabilities and Reserve of Bank of England.

1854.						
	Liabilities, Average of Year, £15,740,833.	Average Liabilities of Year = 100.	Reserve, Average of Year, £7,290,333.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities 46 per Cent.	
	£	400	£		40	
January	18,954,000	120	8,077,000	111	43	
February		99	8,237,000	113	53	
March	15,686,000	99	8,040,000	110	51	
April	15,903,000	101	5,445,000	75	34	
May	14,082,000	89	5,548,000	76	39	
June	14,729,000	93	7,072,000	97	48	
July	16,265,000	103	7.341,000	101	45	
August	14,639,000	93	7,390,000	101	51	
September		100	7,588,000	104	48	
October	15,066,000	95	6,629,000	91	44	
November	15,144,000	96	7,459,000	102	49	
December	16,892,000	107	8,658,000	119	51	

	Liabilities, Average of Year, £17,698,583.	Average Liabilities of Year = 100.	Reserve, Average of Year, £8,366,583.	Average Reserve of Year $= 100$.	Proportion of Reserve to Liabilities 47 per Cent.
T	£ 15,120,000	85	£ 6,774,000	81	45
January	15,120,000	89	7,480,000	89	48
February				11.7.7.	
March	17,052,000	96	9,109,000	109	53
April	18,306,000	103	8,954,000	107	49
May	17,192,000	97	10,512,000	125	61
June	20,063,000	113	12,273,000	147	61
July	18,708,000	105	10,193,000	122	54
August		106	9,662,000	115	51
September		113	7,904,000	95	39
October		97	5,204,000	62	30
November	16,253,000	92	5,650,000	67	35
December	17,933,000	101	6,684,000	80	37

	Liabilities, Average of Year, £16,864,500.	Average Liabilities of Year = 100.	Reserve, Average of Year, £5,772,083.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities 34 per Cent.	
	£	100	F CCF 000	00	0.4	
January	18,149,000	108	5,667,000	98	31	
February		110	6,284,000	109	34	
March		111	6,290,000	109	33	
April	16,624,000	99	4,565,000	79	27	
May	15,415,000	91	5,023,000	87	33	
June	15,432,000	92	7,372,000	127	48	
July	15,893,000	94	6,378,000	110	40	
August	15,704,000	93	6,770,000	117	43	
September	18,046,000	107	6,594,000	114	36	
October	17,135,000	102	3,781,000	65	22	
November	15,607,000	92	4,352,000	75	28	
December	16,949,000	100	6,189,000	107	36	

TABLE II. Continued—Monthly Averages of Liabilities and Reserve of Bank of England.

		185	7.		
	Liabilities, Average of Year, £17,828,833.	Average Liabilities of Year = 100.	Reserve, Average of Year, £5,347,750.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities, 30 per Cent.
-	£		£		
January		90	5,327,000	100	33
February	17,802,000	100	6,001,000	112	34
March	19,350,000	108	5,958,000	111	31
April	16,815,000	94	4,164,000	78	25
May	15,927,000	89	4,992,000	93	31
June	17,782,000	100	6,537,000	122	37
July	15,797,000	88	6,384,000	120	40
August	16,811,000	94	6,314,000	118	37
September	17,784,000	100	6,728,000	126	38
October	17,481,000	98	4,118,000	77	23
November	19,639,000	110	2,030,000	38	10
December	22,601,000	127	5,619,000	105	25

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	2000.					
	Liabilities, Average of Year, £20,847,833.	Average Liabilities of Year = 100.	Reserve, Average of Year, £12,037,416.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities 58 per Cent.	
_	£		£	23.5		
January		108	8,719,000	72	38	
February	21,390,000	102	11,596,000	96	54	
March	21,308,000	102	13,004,000	108	61	
April	20,714,000	99	12,555,000	104	60	
May	19,536,000	94	12,147,000	101	62	
June	20,765,000	100	12,648,000	105	61	
July	19,940,000	96	11,086,000	92	55	
August	19,482,000	93	11,345,000	94	58	
September	20,892,000	100	12,920,000	107	62	
October	20,618,000	99	12,722,000	106	62	
November	20,255,000	97	12,247,000	102	61	
December	22,659,000	108	13,460,000	112	60	

	Liabilities, Average of Year, £22,530,833.	Average Liabilities of Year = 100.	Reserve, Average of Year, £11,076,175.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities 49 per Cent.
т.	£	100	£	0.4	
January		100	6,146,000	81	33
February		95	6,700,000	88	38
March		105	7,814,000	103	40
April	21,973,000	102	7,488,000	98	40
May	22,969,000	101	6,982,000	92	38
June	23,920,000	105	7,323,000	96	38
July	21,852,000	95	6,241,000	82	35
August	21,200,000	92	7,332,000	96	43
September	22,562,000	97	8,412,000	111	47
October	21,922,000	101	7,775,000	102	42
November	21,925,000	99	8,710,000	114	47
December	23,356,000	108	10,413,000	137	52

TABLE II. Continued—Monthly Averages of Liabilities and Reserve of Bank of England.

1860.						
	Liabilities, Average of Year, £20,893,333.	Average Liabilities of Year = 100.	Reserve, Average of Year, £8,451,083.	Average Reserve of Year = 100,	Proportion of Reserve to Liabilities, 40 per Cent.	
	£		£			
January	21,658,000	104	8,673,000	103	40	
February	21,604,000	103	8,452,000	100	39	
March	23,385,000	112	9,142,000	108	39	
April	22,278,000	107	6,991,000	83	32	
May	20,762,000	99	8,304,000	98	40	
June	21,474,000	103	9,771,000	116	45	
July	20,477,000	98	8,597,000	102	42	
August	19,948,000	96	8,514,000	101	43	
September	20,845,000	100	9,756,000	115	47	
October	19,167,000	92	7,755,000	92	41	
November	19,536,000	93	7,541,000	89	38	
December	19,586,000	94	7,917,000	94	40	

	1001.						
	Liabilities, Average of Year, £18,481,383.	Average Liabilities of Year = 100.	Reserve, Average of Year, £7,611,333.	Average Reserve of Year. = 100.	Proportion of Reserve to Liabilities 41 per Cent.		
	£		£		•		
January	18,488,000	100	6,146,000	81	33		
February	17,614,000	95	6,700,000	88	38		
March	19,481,000	105	7,814,000	103	40		
April	18,784,000	102	7,488,000	98	40		
May	18,595,000	101	6,982,000	92	38		
June	19,352,000	105	7,323,000	96	38		
July	17,607,000	95	6,241,000	82	35		
August	16,978,000	92	7,332,000	96	43		
September	17,948,000	97	8,412,000	111	47		
October	18,655,000	101	7,775,000	102	42		
November	18,367,000	99	8,710,000	114	47		
December	19,907,000	108	10,413,000	137	52		

1002.						
	Liabilities, Average of Year, £22,414,175.	Average Liabilities of Year = 100.	Reserve, Average of Year, £10,194,416.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities 45 per Cent.	
January	£ 21,271,000	95	£ 10,308,000	101	48	
February		94	10,201,000	100	48	
March		97	10,762,000	105	49	
April	22,229,000	99	10,461,000	103	47	
May	22,034,000	98	10,472,000	103	47	
June	22,653,000	101	9,423,000	92	42	
July	23,453,000	105	10,106,000	99	43	
August	22,554,000	101	10,428,000	102	46	
September	23,610,000	105	11,179,000	109	47	
October	22,692,000	101	9,473,000	93	42	
November	22,216,000	99	9,463,000	93	43	
December	23,366,000	104	10,057,000	98	43	

TABLE II. Continued—Monthly Averages of Liabilities and Reserve of Bank of England.

1863.								
	Liabilities, Average of Year, £21,946,666.	Average Liabilities of Year = 100.	Reserve, Average of Year, £8,536,333.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities, 39 per Cent.			
-	£	400	£	00	07			
January		103	8,483,000	99	37			
February		96	9,311,000	109	44			
March	22,785,000	104	9,758,000	114	43			
April	22,070,000	101	9,175,000	108	41			
May	21,651,000	99	8,738,000	102	40			
June		109	9,088,000	106	38			
July		105	8,095,000	95	35			
August		91	8,406,000	98	42			
September		98	9,019,000	106	42			
October		97	7,316,000	86	34			
November	20 1 20 000	92	6,895,000	81	34			
December	22,802,000	104	8,152,000	96	36			

1804.								
	Liabilities, Average of Year, £20,600,750.	Average Liabilities of Year = 100.	Reserve, Average of Year, £7,478,583.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities, 37 per Cent.			
January	£ 21,366,000	104	£ 7,476,000	100	35			
February		101	8,059,000	108	39			
March	22,453,000	109	8,668,000	116	39			
April		101	6,562,000	88	31			
May		100	6,765,000	91	33			
June		107	8,403,000	113	38			
July	20,377,000	99	6,528,000	87	32			
August	19,550,000	95	5,944,000	79	30			
September		96	7,241,000	97	36			
October		92	6,497,000	87	34			
November	19,669,000	95	8,233,000	110	42			
December	20,419,000	99	9,367,000	126	46			

1865.

	Liabilities, Average of Year, £21,200,250.	Average of Liabilities of Average of Year,	Reserve, Average of Year, £8,089,750.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities, 38 per Cent.
	£		£	400	**
January		98	8,315,000	103	40
February	20,813,000	98	9,080,000	112	44
March	22,844,000	108	9,885,000	122	43
April	21,873,000	103	8,578,000	106	39
May	21,918,000	103	8,607,000	107	39
June		109	9,871,000	122	39
July	21,567,000	102	7,693,000	95	43
August	20,749,000	98	6,961,000	86	36
September	21,007,000	99	7,335,000	91	33
October	19,590,000	92	5,338,000	66	35
November	18,747,000	88	7,355,000	91	27
December	21,402,000	101	8,058,000	100	38

TABLE II. Continued—Monthly Averages of Liabilities and

		186	6.	1866.								
	Liabilities,	Aronogo	Posowro	А точото	Proportion							
4	Average of	Average Liabilities of	Reserve, Average of	Average Reserve of	of Reserve							
	Year.	Year	Year,	Year	to Liabilities							
	Year, £22,603,250.	= 100.	£6,745,000.	= 100.	30 per Cent.							
	£		£		The state of							
January	19,420,000	86	6,381,000	95	33							
February	17,865,000	79	7,583,000	113	43							
March	20,098,000	89	8,420,000	125	42							
April	19,392,000	86	6,847,000	102	35							
May	23,266,000	103	2,979,000	44	13							
June	28,425,000	126	4,076,000	60	14							
July	24,199,000	107	3,636,000	54	15							
August	22,257,000	98	4,798,000	71	21							
September	23,277,000	103	7,765,000	115	33							
October	23,240,000	103	7,531,000	112	32							
November	23,343,000	103	9,421,000	140	40							
December	26,457,000	117	11,503,000	171	43							
		186	7.									
	Liabilities.	Average	Reserve,	Average	Proportion							
	Average of	Liabilities of	Average of	Reserve of	of Reserve							
	Year,	Year	Year,	Year	to Liabilities							
	£26,106,750.	= 100.	£12,906,333.	= 100.	49 per Cent							
	£		£									
January		102	11,057,000	86	41							
February	24,964,000	96	11,394,000	88	46							
March	25,985,000	99	12,246,000	95	47							
April	25,306,000	97	11,128,000	86	44							
May	25,803,000	99	11,475,000	89	44							
June	27,900,000	107	13,675,000	106	49							
July	26,695,000	102	13,526,000	105	51							
August	26,186,000	100	14,443,000	112	55							
September	27,553,000	106	15,617,000	121	57							
October	25,737,000	99	13,706,000	106	53							
November	24,706,000	95	13,165,000	102	53							
December	25,655,000	98	13,444,000	104	52							
		186	8.									
	Liabilities,	Average	Reserve,	Average	Proportion							
	Average of	Liabilities of		Reserve of	of Reserve							
	Year,	Year	Year,	Year	to Liabilities							
	£25,619,250.	= 100.	£11,903,166.	= 100.	46 per Cent.							
Townson	£ 000	100	£	110	48							
January	27,285,000	106	13,116,000	110	52							
February	25,217,000	98	13,057,000	110	50							
March	26,049,000	102	12,976,000	109 96	45							
April	25,635,000	100	11,493,000	98	44							
May	26,620,000	104	11,684,000									
June	28,026,000	109	13,683,000	115	49							
July	26,843,000	105	12,669,000	106	47 48							
August	23,844,000	93	11,495,000	96								
September	24,140,000	94	11,906,000	100	49							
October	24,523,000	96	10,707,000	90	44							
November	24,158,000	94	10,067,000	85	42							
December	25,091,000	98	9,985,000	84	40							

TABLE II. Continued—Monthly Averages of Liabilities and Reserve of Bane of England.

1869.								
	Liabilities, Average of Year, £23,713,500.	Average Liabilities of Year = 100.	Reserve, Average of Year, £10,320,175.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities, 43 per Cent.			
	£	400	£		20			
January	25,247,000	106	9,753,000	94	39			
February	22,883,000	96	10,139,000	98	44			
March	24,981,000	105	9,754,000	94	39			
April	23,112,000	97	8,328,000	81	36			
May	23,038,000	97	8,331,000	81	36			
June	25,277,000	106	10,993,000	107	43			
July	24,832,000	105	11,205,000	109	45			
August	22,514,000	95	12,043,000	117	53			
September	22,989,000	97	12,001,000	116	52			
October		96	10,061,000	98	44			
November	22,216,000	94	10,059,000	98	45			
December	24,750,000	104	11,175,000	108	45			

10/0.							
	Year, Year	Reserve, Average of Year, £12,435,333.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities, 47 per Cent.			
	£		£				
January	26,565,000	101	10,772,000	86	40		
February	26,955,000	102	11,974,000	96	44		
March	28,282,000	107	12,942,000	104	46		
April	25,415,000	96	11,666,000	94	46		
May	25,528,000	97	11,672,000	94	46		
June	28,664,000	109	13,258,000	107	46		
July	26,741,000	102	11,473,000	92	43		
August	26,693,000	101	10,981,000	88	41		
September	25,956,000	98	13,449,000	108	52		
October	24,444,000	93	13,019,000	105	53		
November	24,775,000	94	13,286,000	107	54		
December	26,283,000	100	14,732,000	118	56		

1871.

	Liabilities, Average of Year, £29,022,583.	Average of Liabilities of Aver Year, Year Y	Reserve, Average of Year, £14,162,916.	verage of Reserve of Year,	Proportion of Reserve to Liabilities, 49 per Cent.
	£		£	-	
January	26,468,000	91	13,242,000	94	50
February	26,725,000	92	13,464,000	95	50
March	31,872,000	110	13,764,000	97	43
April	29,807,000	103	13,291,000	94	45
May	28,199,000	97	14,691,000	104	52
June	30,167,000	104	17,175,000	121	57
July	33,138,000	114	16,876,000	119	51
August	28,404,000	98	15,186,000	107	53
September	27,714,000	95	13,485,000	95	49
October	27,859,000	96	9,529,000	67	34
November	28,789,000	99	13,802,000	97	48
December	29,129,000	100	15,450,000	109	53

TABLE II. Continued—Monthly Averages of Liabilities and

		187	9		
		107	2.		1
h	Liabilities, Average of Year, £29,268,750.	Average Liabilities of Year = 100.	Reserve, Average of Year, £12,122,416.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities, 41 per Cent.
T	£	102	£	110	40
January	30,031,000	103	14,482,000	119	48
February	30,014,000	103	14,237,000	117	47
March	32,688,000	111	13,656,000	113	42
April	31,042,000	106	10,977,000	90	35
May	28,956,000	99	10,302,000	85	36
June	29,655,000	101	13,405,000	111	45
July	29,465,000	101	11,845,000	98	40
August	28,911,000	99	12,139,000	100	42
September	29,084,000	99	11,411,000	94	39
October	26,428,000	90	8,648,000	71	33
November	27,243,000	93	10,754,000	88	39
December	27,708,000	95	13,613,000	112	49
		187	<i>3</i> .		
	Liabilities,	Average	Reserve,	Average	Proportion
	Average of	Liabilities of	Average of	Reserve of	of Reserve to
	Year, £28,986,583.	Year = 100.	Year, £12,051,000.	Year = 100.	Liabilities, 42 per Cent.
	£		£		
January	28,527,000	98	13,792,000	115	48
February	32,158,000	111	15,340,000	129	48
March	34,985,000	121	14,913,000	124	43
April	33,900,000	117	11,141,000	93	33
May	30,951,000	107	10,497,000	87	34
June	30,314,000	105	11,200,000	93	37
July	26,275,000	91	11,566,000	96	44
August	25,010,000	86	13,005,000	108	52
September	29,345,000	101	13,131,000	109	45
October	25,746,000	89	8,560,000	71	33
November	23,914,000	83	9,534,000	79	40
December	26,474,000	91	11,933,000	99	45
		187	4.		
	T 1 1 1111	1		A	D
	Liabilities,	Average Liabilities of	Reserve, Average of	Average Reserve of	Proportion of Reserve to
	Average of	Year	Year,	Year	Liabilities,
	Year, £25,493,500.	= 100.	£11,035,500.	= 100.	43 per Cent.
	£		£		
January	26,352,000	103	12,329,000	112	47
February	25,870,000	101	12,355,000	112	48
March	27,417,000	108	12,826,000	116	47
April	28,167,000	110	10,627,000	96	38
May	26,189,000	103	10,391,000	94	40
June	26,423,000	104	12,276,000	111	46
July	25,295,000	99	10,978,000	99	43
August	23,355,000	92	10,672,000	97	46
September	24,352,000	95	11,488,000	104	47
October	26,176,000	103	9,790,000	89	37
November	22,928,000	90	8,994,000	82	39

90

92

22,928,000 23,398,000

November ...

December ...

8,994,000

9,700,000

41

88

TABLE II. Continued—Monthly Averages of Liabilities and Reserve of Bank of England.

1875.								
	Liabilities, Average of Year, £26,749,985.	Average Liabilities of Year = 100.	Reserve, Average of Year, £11,596,525.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities, 43 per Cent.			
	£		£					
January		93	11,165,000	96	44			
February	23,757,000	89	10,142,000	87	43			
March	26,232,000	98	10,153,000	87	38			
April	24,541,000	92	9,202,000	79	37			
May	23,752,000	89	9,176,000	78	39			
June		105	12,071,000	103	43			
July	31,489,000	117	14,455,000	124	46			
August	29,472,000	110	15,696,000	134	53			
September	28,553,000	106	14,947,000	128	52			
October		107	11,015,000	95	38			
November	24,509,000	91	10,323,000	89	42			
December	26,263,000	98	10,491,000	90	40			

2070.								
	Liabilities, Average of Year, £29,846,347.	Average of Year Liabilities of Year Y	Reserve, Average of Year, £15,961,592.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities, 53 per Cent.			
	£		£					
January		85	9,313,000	58	37			
February	25,744,000	86	11,048,000	69	43			
March		97	12,633,000	79	43			
April	28,092,000	94	13,226,000	83	47			
May	28,237,000	94	13,942,000	87	49			
June	30,576,000	102	16,483,000	103	54			
July	33,094,000	111	18,286,000	114	55			
August	34,067,000	114	20,363,000	128	60			
September	34,891,000	117	21,763,000	130	62			
October	35,406,000	119	19,904,000	124	56			
November	30,857,000	104	17,969,000	113	58			
December	31,825,000	107	16,345,000	102	51			

1877.

	Liabilities, Average of Year, £28,771,424.	Average Liabilities of Year = 100.	Reserve, Average of Year, £12,478,680.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities, 43 per Cent.
т	£	111	£	101	40
January		111	15,563,000	124	49
February		105	14,186,000	113	47
March	31,987,000	108	14,096,000	113	44
April	30,328,000	105	12,516,000	100	41
May	28,841,000	100	11,515,000	92	40
June	30,190,000	105	13,316,000	107	44
July	30,123,000	104	13,672,000	110	45
August	27,701,000	96	12,293,000	99	44
September	27,464,000	96	11,824,000	94	43
October	26,154,000	91	9,662,000	77	37
November	24,394,000	85	10,462,000	84	43
December	25,875,000	90	12,249,000	98	47

TABLE II. Continued-Monthly Averages of Liabilities and

		187	8.	•	
	Liabilities,	Average	Reserve,	Average	Proportion
	Average of	Liabilities of		Reserve of	of Reserve to
	Year,	Year	Year,	Year	Liabilities,
	£29,074,952.	= 100.	£10,879,044.	= 100.	37 per Cent.
T	£	101	£	113	42
January	29,549,000		12,350,000	120	45
February	28,716,000	99 117	13,096,000	114	36
March	34,237,000		12,448,000		
April	30,787,000	106	10,203,000	94	33
May	28,548,000	98	10,479,000	96	37
June	29,229,000	100	11,195,000	103	38
July	27,072,000	93	9,205,000	84	34
August	24,233,000	83	9,179,000	84	38
September	24,893,000	86	11,130,000	102	44
October	30,062,000	103	9,843,000	90	33
November	30,214,000	104	11,789,000	108	39
December	31,651,000	109	10,059,000	92	32
		1845	-61.		
	Liabilities,	Average	Reserve,	Average	Proportion
	Average of	Liabilities of	Average of	Reserve of	of Reserve to
	17 Years,	17 Years	17 Years,	17 Years	Liabilities,
	£18,401,590.	= 100.	£8,869,117.	= 100.	48 per Cent.
	£	400	£	0.0	
January	19,532,000	106	8,560,000	96	44
February	19,556,000	106	9,144,000	103	47
March	19,793,000	107	9,821,000	111	50
April	18,328,000	99	8,281,000	93	45
May	17,481,000	95	8,517,000	96	49
June	18,987,000	103	9,797,000	110	52
July	17,708,000	96	8,744,000	98	49
August	17,210,000	93	8,938,000	101	52
September	18,610,000	101	9,285,000	105	50
October	17,941,000	98	7,804,000	89	44
November	17,893,000	97	8,161,000	92	45
December	19,865,000	108	9,576,000	108	48
€		1862-	-78.		
	Liabilities,	Average	Reserve,	Average	Proportion
	Average of	Liabilities of	Average of	Reserve of	of Reserve to
	17 Years,	17 Years	17 Years,	17 Years	Liabilities,
	£25,751,596.	= 100.	£11,111,574.	= 100.	43 per Cent.
	£		£		
January	25,582,000	99	11,053,000	99	43
February	24,998,000	97	11,451,000	102	46
March	27,285,000	105	11,759,000	105	43
April	26,028,000	101	10,319,000	92	40
May	25,544,000	99	10,101,000	91	40
June	27,345,000	106	11,741,000	105	43
July	26,691,000	103	11,283,000	101	42
August	25,673,000	99	11,414,000	102	44
September	25,661,000	99	12,041,000	108	47
October	25,287,000	98	10,035,000	90	40
November	24,288,000	94	10,681,000	96	44

TABLE II. Continued—Monthly Averages of Liabilities and Reserve of Bank of England.

1845–1878.						
	Liabilities, Average of 34 Years, £22,076,593.	Average Liabilities of 34 Years = 100.	Reserve, Average of 34 Years, £9,990,345.	Average Reserve of 34 Years = 100.	Proportion of Reserve to Liabilities, 45 per Cent.	
	£		£			
January		102	9,806,000	98	43	
February	22,277,000	100	10,297,000	103	. 46	
March	23,539,000	106	10,790,000	108	46	
April	22,178,000	100	9,300,000	93	42	
May		97	9,309,000	93	43	
June		105	10,769,000	107	46	
July		100	10,013,000	100	45	
August		99	10,176,000	101	46	
September		100	10,663,000	106	48	
October		98	8,919,000	89	41	
November	21,090,000	95	9,421,000	94	44	
December	25,831,000	117	10,560,000	105	41	

CHAPTER III.

THE BALANCES OF THE LONDON BANKERS WITH THE BANK OF ENGLAND.

THE subject of the bankers' balances with the Bank of England requires some further consideration. There have been several occasions, principally of late years, on which the balances of the London bankers with the Bank have been larger than the reserve of the Bank of England.

Thus :-

	æ
On 11th November, 1857, the Bank of England reserve was	
" London bankers' balances	4,649,000
On 16th May, 1866, the Bank of England reserve was	1,203,000
London bankers' balances	7.930.000
On 31st October, 1877, the Bank of England reserve was	9,678,000
" London bankers' balances	10,069,000

The last statement shows in a very remarkable way the manner in which the London bankers' balances have continued to expand. October, 1877, was a very severe time of pressure, and the amount of the bankers' balances then shown was by no means the largest in the return of that year, but it still largely exceeded the amount attained during the panic of 1866.

The details of the dates when the bankers' balances exceeded the reserve are as follows:—

NUMBER OF TIMES WHEN THE BANKERS' BALANCES EXCEEDED THE RESERVE OF THE BANK OF ENGLAND.

1847	1 2
1857	7
1000	2 1
1866 1871	
1872	1 6
1874	6
1877	2
	<u>61</u>

Divided into four groups of eight years each, the results are as follows:—

Number of Times when the Bankers' Balances Exceeded the Reserve of the Bank of England.

Years	1844-53	 1
	1854-61	 11
••	1862-69	 21
		_
		61

These statements also show that this tendency is independent of years of panic or extraordinary pressure. Though no panic whatever occurred during the years 1870-1877, the balances of the London bankers were yet more frequently larger in the aggregate than the reserve of the Bank of England in those eight years, than in any of the similar groups of years which preceded.

These figures mark very distinctly that the growth of the balances of the London bankers increases progressively in a larger proportion than the reserve of the Bank of England.

It would be a very desirable thing if the amounts held by the bankers, both in London and the provinces, with the Bank were published every week, as it would then be clear what the reserve really consisted of. If in the published accounts of the Bank the amount of the balances of the bankers were deducted from the ordinary deposits, and a corresponding deduction made from the reserve, as in the form of account given below, it would become obvious at once that, on the 26th December, 1877—the latest statement respecting which these details are available—the deposits of the public with the Bank of England, instead of being 20 millions, were 11 millions, that the reserve available against the ordinary, as distinguished from the banking portion of the liabilities, was $3\frac{1}{2}$ millions instead of 12, and that the proportion of this reserve, instead of being 46 per cent., as the usual statement makes it, was only about 20 per cent.

TABLE III.—BANK OF ENGLAND. ACCOUNT FOR THE WEEK ENDING ON WEDNESDAY, THE 26TH DAY OF DECEMBER, 1877. Arranged so as to Show the Proportion of the Reserve to the Liabilities after Deducting the Balances of the London Bankers' from Both.

ISSUE DEPARTMENT. Notes issued...... 38,231,530 Government debts 11,015,100 Other securities 3,984,900 Gold coin and bullion..... 23,231,530 38,231,530 38.231.530 BANKING DEPARTMENT. Proprietors' capital...... 14,553,000 Government securities ... 13,383,176 3,073,356 Other securities 18,441,368 Public deposits 5.942.869 Notes...... 11,433,545 Less, per contra 8,695,000 Other deposits 20,183,367 Less, bankers' 8,695,000 2,738,545 Gold and silver coin 800.540 · 11.488.367 Seven-day and other bills 306.037 35.363.629 35.363.629

Proportion of reserve to liabilities, less bankers' balances from both, 20 per cent.

Proportion of reserve to liabilities, shown in ordinary

form, 46 per cent.

The statement selected as an illustration is merely taken as being the last published, and not for any other reason. It would have been easy to select the accounts

of other weeks, in which the proportion borne by the London bankers' balances to the deposits generally, and also the proportion of the London bankers' balances to the reserve, would have been considerably larger than in the one chosen, and consequently the proportion borne by the reserve to the remainder of the liabilities would have been far smaller; or to have taken a week's account in which the whole reserve was insufficient to meet the demands which might be made by the London bankers alone. The account of a week has been taken which is not an extreme instance in any way. If the ordinary liabilities of the Bank were distinguished from those incurred to its banking customers, attention would be more readily drawn to those occasions on which the bank reserve of the Bank of England was insufficient to meet the balances of the London bankers. But whether the accounts of the Bank of England are put into this form or not, one thing is clear—that the balances kept by other bankers with it cannot really form part of its own reserve and of the other banks as well, unless the amounts thus derived are held in hand ready to meet These balances are the ultimate reany emergency. serve of all the banks in the kingdom. There is no other country in the world, of which the banking system is known, in which the reserves of the banks are loaned out in the manner in which they are employed in this country. This has been the case here ever since modern banking has assumed its present form. The practice has, therefore, the plea of usage in its favour, and the plea of usage is an extremely strong one; but it is not one which should be followed implicitly when there are good reasons for a change. It might be undesirable to say that these balances should never be loaned out; but it is clear that they form that portion of the resources of the Bank which should be employed with the utmost caution.

The balances of the London bankers with the Bank of England are included among its other liabilities. In another sense also these balances, which, as previously mentioned, must be regarded as being of the nature of till money, as far as transactions between the banks who own it are concerned, form a portion of the general banking reserve of the country. They are the only reserve of ready money kept by the bankers of the United Kingdom beyond the amount of cash in their tills. It is not meant, of course, by this to state that they are the only resources which the bankers of the country would have to fall back on in any time of pressure, for the amounts held at "call," and readily available in other forms, are very large—far larger than any of the figures now before us for consideration. But, as far as actual "cash" is concerned, these balances are the only source from which an immediate supply can be obtained for any immediate need. And to include the amounts which these balances represent among the reserves of the Bank of England, and also among the banking reserves of the country at large, is really to reckon them twice over. An estimate has, therefore, been made of the amount which the liabilities of the Bank of England would be if the balances of the London bankers were deducted from them, and also of the amount at which the reserve of the Bank would stand if these balances were not included in it; that is to say, of the position which the Bank of England would maintain if the London bankers held their own balances in Bank of England notes, or in gold in their own safes.

It has not been possible, in the space to which this statement is of necessity confined, to exhibit what the effect of making up the accounts of the Bank of England in this manner would be on every weekly return of the Bank; but the general effect is shown in col. 16 of Table I. This column contains the proportion which the annual average reserve of the Bank of England would bear to the liabilities if the balances of the London bankers were deducted from those liabilities, and the same amount deducted also from the reserve. The gradual and progressive diminution in the proportion of reserve kept to the liabilities in general has been already noticed; but from this column we may see how much greater and more marked, especially in recent years.

that diminution would have been, had the accounts of the Bank been made up in such a manner as to distinguish the ordinary from the special banking liabilities. The average reserve of the Bank of England would, if the bankers' balances had not been included in it. have been in 1875 but 6 per cent. of the liabilities, and in 1866 but 3 per cent. We may thus see clearly how largely the reserve of the Bank of England is composed of money which is really also the reserve of other banks, and retained against other liabilities, than those which appear in this account—liabilities which, of banks in the United Kingdom alone, are many times larger than those of the Bank of England, which were estimated in 1873 as being more than 500 millions, and are now probably about 520 millions. From a banking position, there is no doubt economy in making the Bank of England keep the reserve of the bankers, but it is equally certain that, from a general point of view, this tends to place any pressure always at one point—a point on which many and varied demands, for domestic and foreign needs, the requirements for wages in England, of farmers in Scotland, of dealers in Ireland, the requirements of great nations forming and increasing their gold circulations, demands for gold for export as well as for the internal circulation of the country, all concen-Great unsteadiness in the value of money is the Several useful suggestions have from time to time been made on this subject, and by those whose opinions deserve careful consideration. But the vis *inertia* which in this case would have to be overcome is a remarkably powerful force. It can only be hoped that those who feel the importance of the subject will keep it steadily before the public, till some arrangement is agreed to more suited to the necessities of the case than the present most inadequate method. It will probably require the experience of another panic, with all its miseries and all its losses, the extent of which none except those who have experienced the real brunt of such a lesson can appreciate, before any better arrangement is arrived at.

Still it is best to place on record some suggestions as to what might be done. If our banks were to keep their own reserves, and publish their accounts weekly or monthly, the reserves held would undoubtedly be much larger than they are now, and business would be of a far more solid character, and more even in its Such an arrangement is hardly likely, but if the amount of the bankers' balances with Bank were published weekly this might have a similar influence. It may be said that publicity on these points would be dangerous, and would lead to greater dangers than those to which we are already exposed in any time of pressure. There seem, however, no solid reasons for sharing in this apprehension. There is a great risk at such times to our highly complicated banking system from alarm among the ill-informed and Their alarms might be soothed by a knowignorant. ledge of the large resources held by the banks; and to those who have the conduct of the business such information might be of signal service. A knowledge of the position of the shoals and breakers to be avoided in his course, valuable at all times to the pilot, is essential among the additional perils of the storm.

It is much to be regretted that the information respecting the amount of the Bankers' Balances, which used to be periodically published, is now no longer

given.

TABLE II. Continued-Monthly Averages of Liabilities and RESERVE OF BANK OF ENGLAND.

1875.						
	Liabilities, Average of Year, £26,749,985.	Average Liabilities of Year = 100.	Reserve, Average of Year, £11,596,525.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities 43 per Cent.	
	£		£			
January	24,988,000	93	11,165,000	96	44	
February	23,757,000	89	10,142,000	87	43	
March	26,232,000	98	10,153,000	87	38	
April	24,541,000	92	9,202,000	79	37	
May	23,752,000	89	9,176,000	78	39	
June	28,101,000	105	12,071,000	103	43	
July	31,489,000	117	14,455,000	124	46	
August		110	15,696,000	134	53	
September		106	14,947,000	128	52	
October		107	11,015,000	95	38	
November	01 400 000	91	10,323,000	89	42	
December	00 000 000	98	10,491,000	90	40	

Liabilities,	Average	Reserve,	Average
Average of	Liabilities of	Average of	Reserve of
Year,	Year	Year,	Year
£29,846,347.	= 100.	£15,961,592.	= 100.
£ 25,498,000 25,744,000	85 86	£ 9,313,000 11,048,000	58

	, , , , , , , , , , , , , , , , , , , ,		, , ,		
	£	-	£		
January	25,498,000	85	9,313,000	58	37
February	25,744,000	86	11,048,000	69	43
March	29,137,000	97	12,633,000	79	43
April	28,092,000	94	13,226,000	83	47
May	28,237,000	94	13,942,000	87	49
June	30,576,000	102	16,483,000	103	54
July	33,094,000	111	18,286,000	114	55
August	34,067,000	114	20,363,000	128	60
September	34,891,000	117	21,763,000	130	62
October	35,406,000	119	19,904,000	124	56
November	30,857,000	104	17,969,000	113	58
December	31,825,000	107	16,345,000	102	51

1877.					
	Liabilities, Average of Year, £28,771,424.	Average Liabilities of Year = 100.	Reserve, Average of Year, £12,478,680.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities, 43 per Cent.
	£		£		
January	32,020,000	111	15,563,000	124	49
February	30,272,000	105	14,186,000	113	47
March		108	14,096,000	113	44
April	30,328,000	105	12,516,000	100	41
May	28,841,000	100	11,515,000	92	40
June		105	13,316,000	107	44
July	30,123,000	104	13,672,000	110	45
August	27,701,000	96	12,293,000	99	44
September	27,464,000	96	11,824,000	94	43
October	26,154,000	91	9,662,000	77	37
November	24,394,000	85	10,462,000	84	43
December	25,875,000	90	12,249,000	98	47

Proportion of Reserve to Liabilities,

53 per Cent.

TABLE II. Continued—Monthly Averages of Liabilities and Reserve of Bank of England.

1878.					
	Liabilities, Average of Year, £29,074,952.	Average Liabilities of Year = 100.	Reserve, Average of Year, £10,879,044.	Average Reserve of Year = 100.	Proportion of Reserve to Liabilities, 37 per Cent.
	£		£		
January	29,549,000	101	12,350,000	113	42
February	28,716,000	99	13,096,000	120	45
March		117	12,448,000	114	36
April	30,787,000	106	10,203,000	94	33
May		98	10,479,000	96	37
June	29,229,000	100	11,195,000	103	38
July	27,072,000	93	9,205,000	84	34
August	24,233,000	83	9,179,000	84	38
September	24,893,000	86	11,130,000	102	44
October	30,062,000	103	9,843,000	90	33
November	30,214,000	104	11,789,000	108	39
December	31,651,000	109	10,059,000	92	32

1845-61.

1040-01.						
	Liabilities, Average of 17 Years, £18,401,590.	Average Liabilities of 17 Years = 100.	Reserve, Average of 17 Years, £8,869,117.	Average Reserve of 17 Years = 100.	Proportion of Reserve to Liabilities, 48 per Cent.	
January	£ 19,532,000	106	£ 8,560,000	96	44	
February		106	9,144,000	103	47	
March		107	9,821,000	111	50	
April	18,328,000	99	8,281,000	93	45	
May	17,481,000	95	8,517,000	96	49	
June	18,987,000	103	9,797,000	110	52	
July	17,708,000	96	8,744,000	98	49	
August	17,210,000	93	8,938,000	101	52	
September	18,610,000	101	9,285,000	105	50	
October	17,941,000	98	7,804,000	89	44	
November	17,893,000	97	8,161,000	92	45	
December	19,865,000	108	9,576,000	108	48	

1862-78.

1000.70.						
	Liabilities, Average of 17 Years, £25,751,596.	Average Liabilities of 17 Years = 100.	Reserve, Average of 17 Years, £11,111,574.	Average Reserve of 17 Years = 100.	Proportion of Reserve to Liabilities, 43 per Cent.	
	£		£	- 44		
January	25,582,000	99	11,053,000	99	43	
February	24,998,000	97	11,451,000	102	46	
March	27,285,000	105	11,759,000	105	43	
April	26,028,000	101	10,319,000	92	40	
May	25,544,000	99	10,101,000	91	40	
June	27,345,000	106	11,741,000	105	43	
July	26,691,000	103	11,283,000	101	42	
August	25,673,000	99	11,414,000	102	44	
September	25,661,000	99	12,041,000	108	47	
October	25,287,000	98	10,035,000	90	40	
November	24,288,000	94	10,681,000	96	44	
December	25,797,000	100	11,545,000	103	44	

TABLE II. Continued—Monthly Averages of Liabilities and Reserve of Bank of England.

1845-1878.						
	Liabilities, Average of 34 Years, £22,076,593.	Average Liabilities of 34 Years = 100.	Reserve, Average of 34 Years, £9,990,345.	Average Reserve of 34 Years = 100.	Proportion of Reserve to Liabilities, 45 per Cent.	
January	£ 22,557,000	102	£ 9,806,000	98	43	
February	22,277,000	100	10,297,000	103	46	
March	23,539,000	106	10,790,000	108	46	
April	22,178,000	100	9,300,000	93	42	
<u>May</u>	21,512,000	97	9,309,000	93	43	
June	23,166,000	105	10,769,000	107	46	
July	22,199,000	100	10,013,000	100	45	
August	21,941,000	99	10,176,000	101	46	
September	22,135,000	100	10,663,000	106	48	
October	21,614,000	98	8,919,000	89	41	
November	21,090,000	95	9,421,000	94	44	
December	25,831,000	117	10,560,000	105	41	

CHAPTER III.

THE BALANCES OF THE LONDON BANKERS WITH THE BANK OF ENGLAND.

THE subject of the bankers' balances with the Bank of England requires some further consideration. There have been several occasions, principally of late years, on which the balances of the London bankers with the Bank have been larger than the reserve of the Bank of England.

Thus :-

	£
On 11th November, 1857, the Bank of England reserve was	
On 16th May, 1866, the Bank of England reserve was	4,649,000
" London bankers' balances	7,930,000
On 31st October, 1877, the Bank of England reserve was	9,678,000
" London bankers' balances	10,069,000

The last statement shows in a very remarkable way the manner in which the London bankers' balances have continued to expand. October, 1877, was a very severe time of pressure, and the amount of the bankers' balances then shown was by no means the largest in the return of that year, but it still largely exceeded the amount attained during the panic of 1866.

The details of the dates when the bankers' balances exceeded the reserve are as follows:—

NUMBER OF TIMES WHEN THE BANKERS' BALANCES EXCEEDED THE RESERVE OF THE BANK OF ENGLAND.

1847	1 2
1857	7 2 1
1866	20 4
1872	6
1874	6 9 2
2011	61

Divided into four groups of eight years each, the results are as follows:—

Number of Times when the Bankers' Balances Exceeded the Reserve of the Bank of England.

,,	1854-61	 11
**	1862-69	 21
,,	1870-77	 28
		_
		61

These statements also show that this tendency is independent of years of panic or extraordinary pressure. Though no panic whatever occurred during the years 1870-1877, the balances of the London bankers were yet more frequently larger in the aggregate than the reserve of the Bank of England in those eight years, than in any of the similar groups of years which preceded.

These figures mark very distinctly that the growth of the balances of the London bankers increases progressively in a larger proportion than the reserve of the Bank of England.

It would be a very desirable thing if the amounts held by the bankers, both in London and the provinces, with the Bank were published every week, as it would then be clear what the reserve really consisted of. If

in the published accounts of the Bank the amount of the balances of the bankers were deducted from the ordinary deposits, and a corresponding deduction made from the reserve, as in the form of account given below, it would become obvious at once that, on the 26th December, 1877—the latest statement respecting which these details are available—the deposits of the public with the Bank of England, instead of being 20 millions, were 11 millions, that the reserve available against the ordinary, as distinguished from the banking portion of the liabilities, was $3\frac{1}{2}$ millions instead of 12, and that the proportion of this reserve, instead of being 46 per cent., as the usual statement makes it, was only about 20 per cent.

TABLE III.—BANK OF ENGLAND. ACCOUNT FOR THE WEEK ENDING ON WEDNESDAY, THE 26TH DAY OF DECEMBER, 1877. Arranged so as to Show the Proportion of the Reserve to the Liabilities after Deducting the Balances of the London Bankers' from Both.

ISSUE DEPARTMENT.					
Notes issued	£ 38,231,530	Government debts	£ 11,015,100		
Motes issued	30,231,030	Other securities			
	38,231,530		38,231,530		
	BANKING DI	EPARTMENT.			
•	£		£		
Proprietors' capital		Government securities			
Rest Public deposits	3,073,356 5,942,869	Other securities	18,441,368		
Other deposits 20,183,367	5,542,009	Less, per contra 8,695,000			
Less, bankers' } 8,695,000			2,738,545		
balances 5		Gold and silver coin	800,540		
~ 1 1 12 121	11,488,367				
Seven-day and other bills	306,037				
	35,363,629		35,363,629		

Proportion of reserve to liabilities, less bankers' balances from both, 20 per cent.

Proportion of reserve to liabilities, shown in ordinary

form, 46 per cent.

The statement selected as an illustration is merely taken as being the last published, and not for any other reason. It would have been easy to select the accounts

of other weeks, in which the proportion borne by the London bankers' balances to the deposits generally, and also the proportion of the London bankers' balances to the reserve, would have been considerably larger than in the one chosen, and consequently the proportion borne by the reserve to the remainder of the liabilities would have been far smaller; or to have taken a week's account in which the whole reserve was insufficient to meet the demands which might be made by the London bankers alone. The account of a week has been taken which is not an extreme instance in any way. If the ordinary liabilities of the Bank were distinguished from those incurred to its banking customers, attention would be more readily drawn to those occasions on which the bank reserve of the Bank of England was insufficient to meet the balances of the London bankers. But whether the accounts of the Bank of England are put into this form or not, one thing is clear—that the balances kept by other bankers with it cannot really form part of its own reserve and of the other banks as well, unless the amounts thus derived are held in hand ready to meet any emergency. These balances are the ultimate reserve of all the banks in the kingdom. There is no other country in the world, of which the banking system is known, in which the reserves of the banks are loaned out in the manner in which they are employed in this country. This has been the case here ever since modern banking has assumed its present form. The practice has, therefore, the plea of usage in its favour, and the plea of usage is an extremely strong one; but it is not one which should be followed implicitly when there are good reasons for a change. It might be undesirable to say that these balances should never be loaned out; but it is clear that they form that portion of the resources of the Bank which should be employed with the utmost caution.

The balances of the London bankers with the Bank of England are included among its other liabilities. In another sense also these balances, which, as previously mentioned, must be regarded as being of the nature of till money, as far as transactions between the banks who own it are concerned, form a portion of the general banking reserve of the country. They are the only reserve of ready money kept by the bankers of the United Kingdom beyond the amount of cash in their tills. It is not meant, of course, by this to state that they are the only resources which the bankers of the country would have to fall back on in any time of pressure, for the amounts held at "call," and readily available in other forms, are very large—far larger than any of the figures now before us for consideration. But, as far as actual "cash" is concerned, these balances are the only source from which an immediate supply can be obtained for any immediate need. And to include the amounts which these balances represent among the reserves of the Bank of England, and also among the banking reserves of the country at large, is really to reckon them twice over. An estimate has, therefore, been made of the amount which the liabilities of the Bank of England would be if the balances of the London bankers were deducted from them, and also of the amount at which the reserve of the Bank would stand if these balances were not included in it; that is to say, of the position which the Bank of England would maintain if the London bankers held their own balances in Bank of England notes, or in gold in their own safes.

It has not been possible, in the space to which this statement is of necessity confined, to exhibit what the effect of making up the accounts of the Bank of England in this manner would be on every weekly return of the Bank; but the general effect is shown in col. 16 of Table I. This column contains the proportion which the annual average reserve of the Bank of England would bear to the liabilities if the balances of the London bankers were deducted from those liabilities, and the same amount deducted also from the reserve. The gradual and progressive diminution in the proportion of reserve kept to the liabilities in general has been already noticed; but from this column we may see how much greater and more marked, especially in recent years.

that diminution would have been, had the accounts of the Bank been made up in such a manner as to distinguish the ordinary from the special banking liabilities. The average reserve of the Bank of England would, if the bankers' balances had not been included in it, have been in 1875 but 6 per cent, of the liabilities, and in 1866 but 3 per cent. We may thus see clearly how largely the reserve of the Bank of England is composed of money which is really also the reserve of other banks, and retained against other liabilities, than those which appear in this account—liabilities which, of banks in the United Kingdom alone, are many times larger than those of the Bank of England, which were estimated in 1873 as being more than 500 millions, and are now probably about 520 millions. From a banking position, there is no doubt economy in making the Bank of England keep the reserve of the bankers, but it is equally certain that, from a general point of view, this tends to place any pressure always at one point—a point on which many and varied demands, for domestic and foreign needs, the requirements for wages in England, of farmers in Scotland, of dealers in Ireland, the requirements of great nations forming and increasing their gold circulations, demands for gold for export as well as for the internal circulation of the country, all concen-Great unsteadiness in the value of money is the result. Several useful suggestions have from time to time been made on this subject, and by those whose opinions deserve careful consideration. But the vis inertiae which in this case would have to be overcome is a remarkably powerful force. It can only be hoped that those who feel the importance of the subject will keep it steadily before the public, till some arrangement is agreed to more suited to the necessities of the case than the present most inadequate method. It will probably require the experience of another panic, with all its miseries and all its losses, the extent of which none except those who have experienced the real brunt of such a lesson can appreciate, before any better arrangement is arrived at.

Still it is best to place on record some suggestions as to what might be done. If our banks were to keep their own reserves, and publish their accounts weekly or monthly, the reserves held would undoubtedly be much larger than they are now, and business would be of a far more solid character, and more even in its tenor. Such an arrangement is hardly likely, but if the amount of the bankers' balances with the Bank were published weekly this might have a similar influence. It may be said that publicity on these points would be dangerous, and would lead to greater dangers than those to which we are already exposed in any time of pressure. There seem, however, no solid reasons for sharing in this apprehension. There is a great risk at such times to our highly complicated banking system from alarm among the ill-informed and Their alarms might be soothed by a knowignorant. ledge of the large resources held by the banks; and to those who have the conduct of the business such information might be of signal service. A knowledge of the position of the shoals and breakers to be avoided in his course, valuable at all times to the pilot, is essential among the additional perils of the storm.

It is much to be regretted that the information respecting the amount of the Bankers' Balances, which used to be periodically published, is now no longer

given.

CHAPTER IV.

THE BALANCES OF THE LONDON BANKERS WITH THE BANK OF ENGLAND. HOW FAR THEY FORM AN EFFICIENT RESERVE.

CONSIDERABLE information of a very interesting character is thrown on the manner in which the balances of the London bankers with the Bank are regarded by the Bank directors, in some letters written by Mr. H. H. Gibbs, of the Bank of England, and published in an appendix to a recent work of Professor Bonamy Price.* These letters, in the places where they appear, form part of a very animated and interesting correspondence between Mr. Gibbs and Professor B. Price, on the Bank rate, the influx and efflux of gold, the "regulation of the currency," and other kindred subjects. It is not desirable to enter into the consideration of these questions at this time, but to examine mainly two points which are discussed in these letters, namely, the manner in which the Bank of England views the bankers' balances kept with it, and the proportion of these sums which they consider they may make use of in the natural way of business. The opinions of any director of the Bank, and especially of an ex-governor of such experience and standing as Mr. Gibbs, are very valuable, and no apology

^{*} Chapters on Practical Political Economy. By Bonamy Price, Professor of Political Economy in the University of Oxford. London: C. Kegan Paul and Co.

is needed for quoting from a correspondence which is open to the whole world to read. The correspondence at the point alluded to turns first on the question whether the custody of such large sums as the bankers keep on their accounts at the Bank of England may not cause some difficulty or even danger to the Bank. Mr. Gibbs in referring to this, and to the fact that the bankers' account is really an extremely easy one to arrange for, commences by remarking that "next to the Government account, the account of the collective bankers is the most certain and the most intelligible.

account in our books, what is the minimum balance wherewith they can live. They must have x on their account (a quantity unknown to all but us), and x - y, therefore—never appears. But if x + y is seen, then we know that y must remain untouched and uninvested; must, in fact, form an addition to our reserve; x is ours for profit if we like to use it, but y is ours only for safe custody. Where is the danger? On the other hand, the possession of that account is of the greatest importance to us, as affording the most perfect and accurate measure of how far the public can at all act independently of us." The italics are in the book quoted from.

Mr. Gibbs continues in a later letter to explain that up to a certain point (x) the normal balance of the bankers was perfectly intelligible to the Bank; "their abnormal balance, (y) is an element of doubt." Now these remarks of Mr. Gibbs appear to confirm the advisability of the step which has been recommended, namely, that the bankers should decide that everything which they keep in hand beyond their working balances should not be placed to the credit of their clearing accounts with the Bank, but should be retained weekly under a separate heading, and not appear in the statements of the Bank. Such a separation would mark out at once what was really "reserve," and what was only nominally "reserve." The bankers' balances up to the point which Mr. Gibbs alludes to, and which may be approximately estimated

from the outside, are really not reserves to them at all; they are merely "till money" on a scale commensurate with their operations, relatively, that is, to the demands which may be made on them at any moment in settling the clearing balances. This would be seen immediately if business in the city were conducted as it was pretty much up to the date when the clearing demands were still settled by the payment of the actual notes, not by means of a cheque drawn on the Bank of England. No one could call the sums held in bank notes in the safe. or the drawer near the counter, for that purpose, a "reserve." The notes were merely "till money," and "till money" the amounts which represent them still remain, though for their own convenience the banks have advanced a step beyond their primitive practice, and have agreed to divest themselves of the actual custody of the notes, and to keep the money itself in Threadneedle Street. It is impossible to call the sums thus held by the Bank on behalf of the bankers, which represent cash merely held to meet immediate claims, a re-Nor is anything beyond these sums, the clearing balances as they may be described, of much use to the The bankers have frequently large sums on their accounts beyond what they require for settling the daily clearing demands. These sums, and they are often very large, are a real reserve to them. But in consequence of uncertainty as to the length of time it may remain with the Bank, the directors do not feel justified in employing the proportion of the sum which exceeds the "minimum balance" in the same manner as they do the proportion which they know must remain The amount, Mr. Gibbs truly says—and with a most proper feeling of the line of action the Bank should always take-"is ours only for safe custody." Now if there is an axiom to be observed in banking, it is that things should always be regarded as they really are. To have a balance in your hands which you cannot use is a hindrance to business, and not a help. The bankers' balances in 1876 fluctuated nearly ten millions between their lowest and their highest point, and as the lowest

may be taken as approximating to the necessary amount which has always to be maintained, it is clear that a very serious responsibility, without any corresponding advantage, must have been imposed on the Bank. To have placed these sums under a separate heading would, by Mr. Gibbs' own showing, have been no detriment to the Bank, while the doing so would have tended to the increase of that comparatively small amount of "unused money," the smallness of which is so constant and so

real a danger to business in this country.

After all, the point perhaps of most importance in the recent decision of the Bank directors, which is dealt with in the next chapter, is how far their new intention of governing their dealings in the matter of discounting by the strict rules of supply and demand can be reconciled with their old practice of protecting the reserve when needful, irrespective of the rate of interest ruling in the market. The two things seem hardly capable of being reconciled with each other. The market rate of interest may be very low, and yet a demand for bullion for export may set in which may require that the rate should be raised. In circumstances like these—and they may occur any day—which influence is the directors to follow? It cannot be doubted that the Bank will be faithful to its old traditions and protect the But considering the vast sums continually floating in the outside market, and the sudden and large demand which may arise at any time out of exchange operations, the Bank may in all fairness call on those who have so large a share in regulating the outside market, to co-operate with it in providing a proper reserve to meet the demands which these operations are at times certain to entail. One thing is clear, that the fixing the rate of discount, and the custody of the reserve which is influenced by that rate, should be in the same hands; and if the rate fixed by the other banks influences the market more than it used to do, as appears to be the case, then the responsibility of providing an adequate reserve should be shared between them and the Bank of England.

CHAPTER V.

THE PUBLISHED RATE OF DISCOUNT OF THE BANK OF ENGLAND.

THE directors of the Bank have recently (June, 1878) made a change in their mode of business with respect to discounts, by announcing that they will no longer feel bound to adhere to the rule of adhering to a fixed minimum rate as closely as they had done, which may have a considerable effect both on their own transactions and on the money market at large.

To investigate the reason for this change it is needful to go back some years, and to trace the practice of the Bank with regard to discounts from the year 1844. The most authentic records of facts of this description are to be found in the reports and evidence given before Parliamentary Committees, as the opinions of those who appeared before those Committees are preserved there in their very words.

The Report of the Committee of the House of Lords on Commercial Distress in 1848, thus contains a historical statement of great value on this question. From it may be learned that for more than a century, down to the year 1839, the Bank rate never exceeded 5, nor fell below 4 per cent. During the pressure of 1839 the rate was raised for some months to 6 per cent., but it was re-

duced to 5 per cent. in January, 1840, and remained at 4 or 5 per cent. as before, till after the Bank Act was passed. At that date the market value of money was, and had been for some time previous, considerably below the Bank rate, so much so, in fact, that the Bank was entirely "out of the market." According to the evidence of Mr. H. J. Prescott, the deputy-governor of the Bank at the time, the Bank did not then hold "above two or three hundred thousand pounds of discounts in London, the market rate being at that time not above 1\frac{3}{4} to 2 per cent." The actual sum is mentioned as being 113,000l, when the Bank rate was reduced to 2\frac{1}{2} per cent. in August, 1844.

This was the date at which the "new system of discounting," as Mr. Prescott termed it in his evidence. was adopted by the Bank. The novelty of the system consisted in the fact that the Bank commenced from the autumn of 1844 to adapt its own rate to the market rate, and with such effect that the governor of the Bank, Mr. James Morris, in giving evidence on the same occasion as Mr. Prescott, considered that by 1848 the Bank held half the discounts then in the market. "I consider," were Mr. Morris's words, "that in London the discounts by other parties, the great discount brokers and bankers, must be equal to the amount which the Bank holds under discount." And, in answer to another question, Mr. Morris added, "I think that the discount brokers and other parties afford altogether to the public an amount of discount equal to that afforded by the Bank, except in times of extreme pressure."

These observations made by the governor and the deputy-governor of the Bank in 1848 show what the position of the Bank of England was towards the outside market thirty years ago. They are supplemented and supported by the remarks made by Mr. Samuel Jones Lloyd (afterwards Lord Overstone) at the same date, when examined before the "Committee on Commercial Distress" of the House of Commons. Mr. Lloyd's evidence was to the effect that the Bank had at

that time become more of a competitor in discount business than formerly, owing to the fact that it made its own terms conform to the fluctuations in the market rate more closely than it used to do. "The Bank rate," Mr. Lloyd said, "formerly was 4 or 5 per cent.; if the market rate of interest was below 4 per cent., the Bank ceased to discount till it got up again to that point. But in point of fact, latterly the discount department has become a very active department of the Bank." Mr. Lloyd's evidence thus confirms the statement which Mr. Morris had made.

This describes the position of matters in 1848. great alteration had occurred in it nine or ten years later, when a Select Committee of the House of Commons collected further evidence on the working of the Bank Mr. D. B. Chapman was examined before that Committee; by his evidence it is shown that the rate charged by the Bank of England in 1857 was not as it is at present, almost invariably above the outside rate. but that it worked more nearly in unison with it. being sometimes a little above and sometimes a little below the market rate. When the Bank rate was very low the market rate was a little lower, and when the Bank rate was very high the market rate was a little higher. The evidence of the late Sir D. Salomons before the Committee of 1858 supported Mr. Chapman's remarks, and shows how closely the Bank rate conformed to the market rate at that period. In 1857, however, the first signs of divergence between the Bank rate and the market rate appear to have occurred. Sir D. Salomons mentioned that a few months previously the London and Westminster Bank had deviated from the principle of working in accordance with the Bank. His words were, "We at that time altered our system. We do not now follow so closely the Bank rate; we have, as far as we can, broken from it, adopting what may be called an expedient rate, not following the Bank rate so closely as hitherto we have done."

This statement of Sir David Salomons shows the direction in which matters were tending in his time.

Gradually it became a question whether the publication of a fixed rate by the Bank of England had not become as much an anachronism, as a permanently fixed rate was in the year 1844. When a fixed rate was published by the Bank, people could tell at once whether they could get their business done cheaper elsewhere; and in this period of sharp competition, such knowledge is enough of itself to deter them from coming to a Bank, the rate of which they know already. The Bank lost thus that power of delicate adjustment of its position to the precise needs of the moment, which is essential to the maintenance of business. It could not, as it were, feel the pulse of its customers as closely as it could were its rate not advertised; it could not follow as well the distinctions made between one class of paper and another, as it could did a hard and fast rule not exist.

Meanwhile, the competition for bills in the discount market is beyond question most sharp at the present day. Within a period of about twenty years, several joint stock companies have been formed for the purpose of carrying on this class of business, and the number of private firms engaged in it appears also to augment. Various circumstances—the increasing supply of money, the power of dealing by means of telegraphic transfers, and other circumstances—have all tended to limit the supply of bills, which is apparently smaller now in proportion to the supply of money than it was ten or fifteen years since, whilst the competition for those in the market is closer than ever.

CHAPTER VI.

THE PUBLISHED RATE OF DISCOUNT OF THE BANK OF ENGLAND AND THE RESERVE.

As mentioned in the last chapter, the Bank of England announced in June, 1878, that it would, when occasion required, discount for those of its customers who transacted business exclusively with it, at a rate lower than that advertised as the official rate. One result of this will be for the future that the Bank rate will be less a real guide to the value of money than it has been, since, unless more exact intimation is given, it will be impossible to say how far the published rate is being adhered to. Events have been gradually drifting in this direction for some time past. The outer market, which is compelled to regulate its actions by the strict law of supply and demand, has, on more occasions than one, recognised this fact. Thus, in November, 1877, the metropolitan joint stock banks formally acknowledged that they could not remain bound by the old rule of allowing interest on deposits at "one below Bank rate," and undertook for the time an independent course of action.

But such a proof as the one just mentioned of the inability of the outside market to accept the Bank rate as an index to the real value of money, important as it was by way of marking the gradual breaking up of the traditional rule which had governed the English money market generally for years, is of far smaller importance than an official recognition by the Bank directors that the Bank itself can no longer be bound by its own rate. This, or nothing at all, is the outcome of the recent alteration in the practice of the Bank, and since it cannot be supposed that the Bank has announced the alteration, and had to meet the objections which were certain to be made to it, without intending to abide by its decision, and to act upon it, the conclusion appears to be that the Bank rate by itself is distinctly less a guide to the value of money than it used to be.

The system which has thus practically come to an end commenced in the year 1844. Up to that date the Bank rate had been almost always a fixed rate, which for more than a century was never raised above 5 per cent., or allowed to drop below 4. In 1839, a 6 per cent. rate was charged for some little time, but with that exception the old state of matters may be regarded as lasting till 1844, when the establishment of the principle of a rate to fluctuate according to the wants of the market was as great an innovation as the recent decision of the Bank is now. Ancient prestige, actual pre-eminence of capital, the fact that they are the bankers of the Government and the issuers of the only description of notes which are legal tender throughout England and Wales—all these circumstances enabled the Bank to take a position which gave its announcement as to a rate of interest a great if not a preponderating weight. The Bank of England told all the monetary world what it would charge for money, and all the monetary world in degree followed it. times it has happened that the directors have not been right in their decisions, and have lowered the rate when they should have advanced it, or advanced it or lowered it when they ought to have remained where they were. Sometimes they have worried the market by needless alterations. Thus, to go back only a short period, there were in the year 1873 no fewer than twenty-four changes

in the Bank rate, that is to say, twenty-four changes in twelve months, and it is difficult to imagine what events can possibly have occurred to justify an alteration in the price of money once a fortnight for a whole year. Again, what may be called an experimental rate has occurred, as in 1871, when 2½ per cent. was charged for four weeks. Putting, however, these occasions aside, the decision of the directors of the Bank as to the value of money has generally carried great weight with it. In a market so delicately balanced as ours, in which the causes of change are so numerous and often so unexpected, even the best informed must occasionally err. But the directors, as a body, are men of high standing and of much experience, acting with a strong sense of the responsibility of their position, and with considerable opportunities of observing what the demand for money is likely to be. The fixing the rate is indeed one of the portions of the work of carrying on the business of the Bank which such a body of men as the Bank directors are likely to do best. A committee of men with great and varied commercial experiences, fluctuating but slightly from year to year, with a head appointed for two years—which is, broadly speaking, the constitution of the Bank court—is very well constituted to judge of the value of money from day to day. It is not so well constituted to meet the greater difficulties which banking has now-a-days to contend with, and which appear to require that a permanent governor should be appointed to maintain a more complete control over the business of the Bank than can be done by any body of directors, however able and wellselected. But this is not the point immediately under consideration. If the Bank carries out the decision it is understood to have arrived at, and admits that it cannot fix a definite rate for advances, it will hardly be possible to establish any new representative body in London whose resolutions as to the rate to be charged on bills will carry exactly the same weight as the decisions of an independent body, such as the directors of the Bank are.

The inconvenience, however, of there being no recognised standard for the value of money would be very great. It is far safest for all bankers, and for those who do business with them, that there should be such a Since the Bank has now let it be known that it does not mean to be guided by its own rate at all times, it becomes needful to consider what standard can be established as a substitute for that guidance which will no longer exist exactly in the same form for the future, and who are to take the place of the Bank directors in giving a public notice of the rate. The bankers and bill brokers of the metropolis seem the fittest persons to judge of the value of money, and the decision of a committee appointed by them, and meeting at the Clearing House, to be the best substitute that can be found for the decision of the Bank directors. be composed of representatives of both private and joint stock banks. Both classes of banks are engaged in carrying on the same description of business, both appeal to the same public for support, and it is in the highest degree desirable that there should be no division of interest between them. This committee might meet once a week, or when occasion required. But as such a representative body might find it somewhat difficult to agree on a rate to be charged for discounts, and since the conclusions to which they came might not be so readily accepted as authoritative as those of the Bank directors, while at the same time some recognised standard of action will be strongly required, the best course for the Clearing House Committee would be to agree not on the rate to be charged on bills, but on the rate to be allowed on deposits.

Two advantages, in particular, would follow if this

plan were completely carried out.

1. Such an arrangement would tend to check any undesirable competition for deposits, and would tend to a uniformity of action between all the bankers of the country generally, and of the metropolis in particular. Both private and joint stock banks would be represented on the committee proposed, and the representa-

a distinct, though gradual, diminution of the reserve to the liabilities become it is not only the proportion which has character of the demands which may the reserve has, during the last two undergone a great, though a gradual a has been caused by the great increase which other bankers have kept with England. The returns on which this arcontain a statement of the balances which bankers have kept with the Bank of will now proceed to consider the amount balances, and the proportion which the

banking reserve.

Col. 11 contains the annual average of bankers' balances. In these there is a able and progressive increase, far larger than in the reserve itself. That there had bee crease of late years was a matter of conjecparticulars are not given in the weekly stat it is only the annual return which supplies information. The average amount, which 1 million in 1844, had become more than 5 1877, the latest date to which the inform present be given. By the balances of bankers," it is understood that the balan clearing bankers" are described. There a doubtless other amounts than these bankers, and really forming a portion of reserve of bankers in the aggregate on deput Bank. There are now many important b in the metropolis, besides the London ba so called. There are Scotch banks, Irish ba banks, foreign banks, all doing large London, and doubtless keeping corresponding money in reserve. There are also large sun doubtless kept with the branches of the B land at Manchester, at Liverpool, and el provincial banks, which often do business scale, quite comparable with that of me

representatives of the metromeets from time to time, and on deposits. It is desirable ould be carried further, and be arranged at these meetings

rate can hardly be separated reserve. The metropolitan have elected, now that the altered a position, to work at all. But the inconvenience have been so great that they devise the method mentioned recognised standard, which in ped, be carried further till it inthe country. A further advantation of a suitable reserve, which he from the position of the body responsibility of putting forward recognised standard for the rest

tives of both classes of banks would concur in the rate to be recommended. Hitherto, though the practice of allowing interest on deposits is believed to be very general among the private banks, no private bank in London has ever made a public statement of the rate to be allowed. There is much to be said on both sides of the question as to whether the allowing interest on deposits, and the consequent enormous accumulation of money in the hands of banks, is a desirable thing or not; but yet the allowing interest on deposits is become so much the rule that the question is now not whether the practice is or is not a desirable one, but how it can best be regulated for the general advantage.

This leads to the second point.

2. Such an arrangement would tend to check an unduly high rate of interest being allowed on deposits. The rate would be known as that which a representative and prudent body of bankers thought it safe to adopt. Any bank deviating from the rule would be bound, as it were, to show cause why it did not follow the example set by such a body of men. The Banking Committee would hardly be likely to recommend an unduly high rate. Such a rate is dangerous for two reasons: the one, because an unduly high rate of interest has a tendency to cause those who allow it to seek unsafe but highly-paying securities; the other, because it has a tendency to cause reserves to be pared down to a minimum. While speaking on this subject, it is as well to mention that at least one bank is understood to have made at no very distant period no profit whatever on the sums it held on deposit for a considerable time. No doubt any bank so circumstanced held other sums belonging to its customers on which no interest was allowed, and from which and its other resources it derived the means of meeting its expenses and paying its dividend. But to have the custody of vast sums with all the attendant risks, without any resulting profit to set against these, cannot be a desirable or a safe thing.

In part the plan proposed here has been carried out.

A committee, composed of representatives of the metropolitan joint stock banks, meets from time to time, and fixes the rate to be allowed on deposits. It is desirable that this arrangement should be carried further, and that a uniform rate should be arranged at these meetings for all banks.

To conclude, fixing a rate can hardly be separated from the custody of the reserve. The metropolitan joint stock banks might have elected, now that the Bank rate stands in so altered a position, to work without a recognised rate at all. But the inconvenience of such a course would have been so great that they have been compelled to devise the method mentioned above of establishing a recognised standard, which in time may, it is to be hoped, be carried further till it includes all the banks of the country. A further advantage of the method here sketched out would be that it would facilitate the formation of a suitable reserve, which is an adjunct inseparable from the position of the body which has to bear the responsibility of putting forward that rate which is the recognised standard for the rest of the community.

CHAPTER VII.

SOME OF THE CAUSES WHICH INFLUENCE THE RATE OF INTEREST CHARGED BY THE BANK OF ENGLAND.

A SPECIAL set of tables has been prepared to illustrate the relation between the reserve of the Bank of England and the current rate of interest. These tables, No. II. and No. VI. of the series, give the average minimum rate of discount for each month in the years 1845-1878, and the corresponding averages of the liabilities and the reserve. The average yearly rate also requires some attention. It is given in col. 38 of Table I.

The average rate of interest charged by the Bank has, after having increased, diminished again during recent years. If we divide the period now under consideration into four groups, between the years 1846-1853, 1854-1861, 1862-1869, 1870-1877, we shall find that the averages of the four groups are as follows:—

		£	8.	d.
1846-1853		3	6	3
1854-1861	***************************************	4	15	5
1862-1869		4	4	8
1870-1877	***************************************	3	8	5

It is also curious to observe that there is a periodic

fluctuation from one season of the year to another. The details are as follows:—

Average, Month by Month, of the Bate of Interest Charged by the Bank of England for the Years 1846-53, 1854-1861, 1862-1869, 1870-1877.

Average Rate for Years, 1846 £3 6s. 5	-1853,	Average Rate for the Eight Years =100.	Average Rate for the Eight Years, 1854-1861, £4 15s. 5d.		Average Rate for the Eight Years =100.	
January February March April May June July August September October November	£ s. d. 3 3 11 3 3 9 3 4 9 3 4 7 3 5 0 3 5 0 3 6 3 3 6 7 3 11 3 3 12 3 3 7 7	96 96 96 97 98 98 98 100 100 107 109	January February March April May June July August September October November December	£ s. d. 5 2 8 4 18 6 5 0 9 4 16 4 5 1 11 4 11 8 4 7 10 4 1 2 4 2 5 4 13 11 5 3 5	106 103 105 101 106 96 92 87 85 99 110	
December	0 1 1	102	December	0 0 0	100	
Average Rate for Years, 1862- £4 8s. 8	the Eight	Average Rate for the Eight Years =100.	Average Rate for Years, 1870 £3 8s. 5	the Eight 1877,	Average Rate for the Eight Years =100.	
Average Rate for Years, 1862-	the Eight 1869,	Average Rate for the Eight Years	Average Rate for Years, 1870-	the Eight 1877,	Average Rate for the Eight Years	
Average Rate for Years, 1862- £4 8s. 8	the Eight	Average Rate for the Eight Years	Average Rate for Years, 1870 £3 8s. 5	the Eight 1877,	Average Rate for the Eight Years	
Average Rate for Years, 1862- £4 8s. 8	the Eight 1869, d.	Average Rate for the Eight Years =100.	Average Rate for Years, 1870- £3 8s. 5	the Eight 1877, d.	Average Rate for the Eight Years =100.	
Average Rate for Years, 1862- £4 8s. 8 January	the Eight 1869, d. & s. d. 4 10 2	Average Rate for the Eight Years =100.	Average Rate for Years, 1870- £3 8s. 5 January	the Eight 1877, d	Average Rate for the Eight Years =100.	
Average Rate for Years, 1862- £4 8s. 8 January February March	the Eight 1869, d. & s. d. 4 10 2 4 4 5	Average Rate for the Eight Years =100.	Average Rate for Years, 1870- £3 8s. 5 January February March	the Eight 1877, d. £ s. d. 3 11 2 3 1 1	Average Rate for the Eight Years =100.	
Average Rate for Years, 1862- £4 8s. 8 January February March April	### the Eight 1869, d. ### s. d. ### 10 2 ## 4 5 ## 3 19 3	Average Rate for the Eight Years = 100.	Average Rate for Years, 1870- £3 8s. 5 January February March April	### the Eight 1877, d. ### s. d. ### 3 1 1 2 3 1 1 3 4 1	Average Rate for the Eight Years =100. 104 89 94	
Average Rate for Years, 1862- £4 8s. 8 January February March	### Eight 1869, d. ### s. d. ## 10 2 ## 4 4 5 ## 3 19 3 ## 3 19 3	Average Rate for the Eight Years = 100. 106 99 93 93	Average Rate for Years, 1870- £3 8s. 5 January February March	### Eight 1877, d. ### s. d. 3 11 2 3 1 1 3 4 1 3 2 9	Average Rate for the Eight Years = 100. 104 89 94 91	
Average Rate for Years, 1862- £4 8s. 8 January February March April May June	### Eight 1869, d. ### S. d. ### 4 5 ## 3 19 3 ## 13 9 ## 4 7 10 ## 4 5	Average Rate for the Eight Years =100. 106 99 93 93 111 104 99	Average Rate for Years, 1870- £3 8s. 5 January February March April May June July	### Eight 1877, d. ### s. d. ### 3 1 1 2 ### 3 4 1 ### 3 2 9 ### 3 9 11 ### 3 5 10 ### 2 18 10	Average Rate for the Eight Years =100. 104 89 94 91 102	
Average Rate for Years, 1862- £4 8s. 8 January February March April	## Eight 1869, d. ## S. d. ## 10 2 ## 4 5 ## 3 19 3 ## 13 9 ## 7 10 ## 4 5 ## 4 6	Average Rate for the Eight Years = 100. 106 99 93 93 111 104 99 99	Average Rate for Years, 1870- £3 8s. 5 January February March April May June July August	### Eight 1877, d	Average Rate for the Eight Years = 100. 104 89 94 91 102 96 86 88	
Average Rate for Years, 1862- £4 8s. 8 January February March April May June July August September	the Eight 1869, d. £ s. d. 4 10 2 4 4 5 3 19 3 4 13 9 4 7 10 4 4 5 4 4 6 3 15 3	Average Rate for the Eight Years = 100. 106 99 93 93 111 104 99 99 89	Average Rate for Years, 1870-£3 8s. 5 January February March April May June July August September	### Eight 1877, d. ### s. d. ### 3 1 1 2 ### 3 4 1 ### 3 2 9 ### 3 9 11 ### 3 5 10 ### 2 18 10	Average Rate for the Eight Years = 100. 104 89 94 91 102 96 86 88 81	
Average Rate for Years, 1862-£4 8s. 8 January February March April May June July August	## Eight 1869, d. ## S. d. ## 10 2 ## 4 5 ## 3 19 3 ## 13 9 ## 7 10 ## 4 5 ## 4 6	Average Rate for the Eight Years = 100. 106 99 93 93 111 104 99 99	Average Rate for Years, 1870- £3 8s. 5 January February March April May June July August	### Eight 1877, d	Average Rate for the Eight Years = 100. 104 89 94 91 102 96 86 88	
Average Rate for Years, 1862- £4 8s. 8 January February March April May June July August September	the Eight 1869, d. £ s. d. 4 10 2 4 4 5 3 19 3 4 13 9 4 7 10 4 4 5 4 4 6 3 15 3	Average Rate for the Eight Years = 100. 106 99 93 93 111 104 99 99 89	Average Rate for Years, 1870-£3 8s. 5 January February March April May June July August September	the Eight 1877, d. £ s. d. 3 11 2 3 1 1 3 4 1 3 2 9 3 9 11 3 5 10 2 18 10 3 0 1 2 15 8	Average Rate for the Eight Years = 100. 104 89 94 91 102 96 86 88 81	

In all the four periods into which this estimate is thus divided, the latter half of the year is the time of the highest charges. This is what we might naturally expect. The autumn and early winter months are the times of greatest business activity. The demands which the home harvest brings are great; the demands which foreign supplies of all kinds entail are more pressing still. The large amounts of produce then coming forward affect the money market; and a deficient har-

vest (should there be a short supply) usually manifests itself about the third week in October. The shipments of corn also from America generally commence early in September, and intensify up to the middle of November. These causes, and others of a kindred nature which there is no need to specify, account for the autumnal demand. They do not, however, exist in the spring. In the month of May, a corresponding, though slighter, increase of pressure may be observed to that taking place in October, November, and December. The opening of those sources of supply which have been locked up by the severity of the winter probably accounts for a considerable part of the increased demand for money indicated by a rise in its value Some effect also must be assigned to the periodic increase in the Scotch note circulation in the months of May and November. increase in that circulation beyond the limits fixed by the legislation of 1844 and 1845 causes an immediate demand on the reserve of the Bank of England for gold. The increase in the Scotch circulation beyond the limit of 1845 did not become very distinctly marked till 1856. It has become very much more considerable of It will be observed that the rate in May was for the years 1844-53 but little above that of every other month in the first half of the year. For the years 1870-78 the rate in May was usually higher than in any other month of the first half of the year, except January. The particulars of the Scotch circulation in May, November, and December, for the years 1875-78 are as follows:—

AUTHORISED LIMIT OF SCOTCH BANK NOTE CIRCULATION, £2,749,271.

	Average of 1875, £6,050,909.	
		ctual Circulation.
	1875.	£
15th	May	. 6.096.052
	October	
30th	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	6.238.417
27th	November	
	December	
	Average of 1876, £6,098,543.	
	1876.	£
13th	May	. 6.040.105
	October	
	November	
	December	

Average of 1877, £6,115,859.

1877.	£
12th May	6,051,550
27th October	6,073,025
24th November	6,755,719
22nd December	6,204,384

Average of 1878, £5,840,533.

187	8.	£
11th Ma	y	5,788,435
26th Oct	ober	5,788,136
	vember	
	cember	

It may be desirable to mention here the causes which lead to these periodic, though temporary, requirements for notes in Scotland.

- "The main causes of the increased note issues in May and November are undoubtedly these:—
 - "1st. The payments of rents and interests on mortgages, which, in Scotland, are almost uniformly made at the half-yearly terms of Whitsuntide (15th May), and Martinmas (11th November).
 - "2nd. The settlement of all important transactions in heritable property, which are also fixed for the same terms.
 - "3rd. The payment of household servants' wages, and in many cases salaries at the same period.
- "These payments are to a large extent made through the medium of bank notes, and thus they get into hands where they remain for a time, many of the parties who receive the notes having no bank account.
 - "It is further to be noted:
 - "1st. That on the 4th of the month an unusually large amount of bills falls due, and if the 4th happens on a Saturday (the day when the returns are made up) we generally look for a heavier return on that account.

- "2nd. The November returns are usually heavier than those in May, because of the requirements of the harvest, travellers, &c.
- "3rd. In the country districts the term-day is in many places regulated by the old style, and thus the payment of farm rents run on into June and December.
- "4th. The great increase this year is, no doubt, chiefly owing to the higher scale of wages, particularly in the mining districts, among the most improvident class of working people."

This statement is quoted from a description of the circumstances written in 1872 by a well-known Scotch banker.

It becomes desirable to recapitulate at this point the monthly fluctuations in the rate of discount charged by the Bank of England, and to compare them with the corresponding fluctuations in France and Germany. The rates of the Banks of England, France, and Germany have therefore been tabulated in a similar manner for the years 1846 to 1877, and divided into periods of eight years and of sixteen years. While these tables show a distinct pressure on the Bank of England in May, and in some degree in November, the other Banks do not appear to experience the same influence. The inference seems to be that the Scotch demand in May and November is of sufficient importance to affect the rate of the Bank of England. If we refer to Table II., at pages 31-32, which contains a summary of the monthly averages of the liabilities and reserve of the Bank of England for the years 1845-78, we shall find that the liabilities of the Bank have been on an average at the lowest point in the months of May and November; that the reserve is then comparatively weak, and the proportion of the reserve to the liabilities low likewise. It is probable that there is some connection between the Scotch demand and these circumstances. ported by a reference to the returns of the Clearing

House when tabulated, so as to show the amount of business passing in each month of the year. The particulars from 1868 to 1878 are given in Table V., at the end of this chapter, at pages 64, 65. Those figures certainly do not show any exceptional demand in the months of May and November, and as this is not traceable in the ordinary course of business of this country, or in the rate charged by the banks of the two other countries, the inference is that the fluctuations shown to exist at the Bank of England at those periods are influenced in an appreciable degree by the Scotch demand.

This was noticed as far back as 1856 by Mr. T. M. Weguelin, who was at that time governor of the Bank. Mr. Weguelin observed in a letter to the Chancellor of the Exchequer (Sir G. C. Lewis) on the effect of this

demand:

"Now with regard to the oscillation of the internal circulation of the country, I may notice that there is, periodically, a demand for currency from the Scotch and Irish banks, which, whilst it produces a most sensible effect upon the Bank of England reserve, is uncontrollable by any action of the Bank. At certain periods of the year, especially of the harvest, the demand for currency commonly greatly exceeds the authorised issue; and as the excess must be issued on gold deposited in certain specified places, that gold is withdrawn from the Bank reserve, to be again restored to it when the reflux of the currency of the Scotch and Irish banks takes place, which is usually in the months of December to March. The Scotch banks very generally exceed their authorised aggregate issue; but with the Irish banks, although the aggregate issue is not usually exceeded, yet it often happens that some are in excess, whilst others are under the authorised amount. But as each bank has to provide for its own excess, the demand on the London bullion reserve is as great as if the whole Irish circulation had gone beyond its limit."

The fluctuations in the circulation of notes in Ireland have been rarely so important as to produce a very marked effect in the way of requiring extra sums of gold to cover them since 1857; but, on the other hand, the note circulation in Scotland, and the periodical fluctuations in the same, have undergone a great increase since

that date.

It would certainly appear to be desirable to mitigate the influence which these demands of a strictly domestic and home character exert. A better arrangement would

provide what the existing law does not provide—a real security for the Scotch issues, without allowing these periodic and strictly temporary demands to press so sharply on the central reserve. This point should be attended to, and at the same time security should also be required for the English country note issues. Opinions are sometimes expressed that it would be a desirable thing to take away the rights of issuing notes possessed by some country bankers, and to substitute instead the notes of the Bank of England. It appears, however, that the only result of such a change, under existing circumstances, would be to concentrate the pressure in any time of difficulty, even more than at present, on the reserve of the Bank of England, to increase the fluctuations in the rate of interest, and to cause higher rates to prevail. And there is no doubt that the existing note issues of the country banks, properly secured, and with adequate and special reserves held against them, might be made of greater service than they now are in carrying on the business of the country.

TABLE IV.—Monthly Averages of Minimum Rate of Discount of Banks of England, France, and Germany for the Eight Years, 1846-53, 1854-61, 1862-69, 1870-77, and for the Sixteen Years, 1846-61, and 1862-77.

184	16-53:		188	54-61.		
Average Rate of 8 Years, £3 6s. 3d.		Rate of 8 Years =100.	Average Rate of 8 Years, £4 15s. 5d.		Rate of 8 Years = 100.	
January	£ s. d. 3 3 11 3 3 9 3 3 9	96 96 96	January February March	£ s. d. 5 2 8 4 18 6 5 0 9	106 103 105	
March	3 4 7 3 5 0 3 5 3	97 98 98	April May June	4 16 4 5 1 11 4 11 8	101 106 96	
July	3 5 0 3 6 3 3 6 7	98 100 100	July	4 7 10 4 2 5 4 1 2	92 87 85	
October November December	3 11 3 3 12 4 3 7 7	107 109 102	October November December	4 13 11 5 4 11 5 3 5	99 110 108	
186	32-69.	-	185	70-77.		
Average Rate of 8 Years, £4 4s. 8d.		Rate of 8 Years =100.	Average Rate of £3 8s.		Rate of 8 Years = 100.	
January February March April May June July August September October	£ s. d. 4 10 2 4 4 5 3 19 3 4 13 9 4 7 10 4 4 5 4 4 6 3 15 3 4 1 11	106 99 93 93 111 104 99 99 89	January February March April May June July August September October	£ s. d. 3 11 2 3 1 1 3 4 1 3 2 9 3 9 11 3 5 10 2 18 10 3 0 1 2 15 8 4 2 8	104 89 94 91 102 96 86 88 81	
November December	4 6 7 4 8 7	102 104	November	4 10 11 3 18 1	133	
	16-61.	-	186	52-77.		
Average Rate of 16 Years, £4 11s. 0d.		Rate of 16 Yrs. =100.	Average Rate of £3 16s.		Rate of 16 Yrs = 100.	
January February March April May June July August September October. November	£ s. d. 4 3 3 4 1 1 4 2 3 4 0 6 4 3 6 3 18 5 3 16 5 3 14 4 3 13 11 4 2 7 4 8 8 4 5 6	103 100 102 99 103 97 94 92 91 102 109	January February March April May June July August September October November December	£ s. d. 4 0 8 3 12 9 3 11 8 3 11 0 4 1 10 3 16 10 3 11 8 3 12 3 3 5 5 4 2 3 4 8 9 4 3 4	105 95 93 93 107 100 94 85 107 116 109	

TABLE IV. Continued. — MONTHLY AVERAGES OF MINIMUM RATE OF BANK OF FRANCE.

	DANK OF	FRANCE.					
6-53.		185	4-61.				
Average Rate of 8 Years, £3 18s. 7d.		Average Rate of 8 Years, 8 Years				Rate of 8 Years =100.	
## 8. d. ## 19 1 ## 0 0 ## 17 11 ## 17 6 ## 17 6 ## 17 6 ## 17 6 ## 17 6 ## 17 6 ## 17 6 ## 17 6 ## 17 6 ## 19 8 ## 0 0 ## 1 3	100 102 99 99 99 99 99 99 99 101 102 103	January February March April May June July August September October November December	£ s. d. 4 17 0 4 16 5 4 14 4 4 8 9 4 7 4 4 6 3 4 5 4 4 4 9 4 14 10 5 1 0 4 18 3	105 105 102 96 97 95 94 93 92 103 110			
2-69.		187	0-77.				
	Rate of 8 Years =100.			Rate of 8 Years =100.			
£ s. d. 4 4 11 3 19 8 3 18 1 3 11 3 3 14 3 3 9 5 3 10 0 3 8 10 3 9 0 3 17 11 4 0 4 3 16 9	113 106 104 95 99 92 93 92 92 104 107 102	January February March April May June July August September October November December	£ s. d. 4 8 9 4 7 10 4 5 6 4 2 10 4 2 3 3 18 9 3 19 10 4 4 6 4 5 0 4 6 7 4 9 7 4 7 6	104 103 100 98 97 92 94 99 100 101 105 103			
16-61.		186	32-77.				
	Rate of 16 Yrs. = 100.	Average Rate of £3 19s.	f 16 Years, 11d.	Rate of 16 Yrs. =100.			
£ s. d. 4 8 0 4 8 3 4 6 1 4 3 8 4 2 5 4 1 10 4 1 5 4 1 7 4 1 0 6	103 103 101 97 98 97 96 95 95 102 106	January February March April May June July August September October November	£ s. d. 4 6 10 3 13 9 4 1 9 3 17 0 3 18 3 3 14 1 3 16 8 3 17 0 4 2 3 4 4 11	109 92 102 96 98 92 94 96 96 103 106			
	7d. \$\mathscr{L}\$ s. d. 3 19 1 4 0 0 3 17 11 3 17 6 3 17 6 3 17 6 3 17 6 3 17 6 3 17 6 3 17 6 3 17 6 3 19 8 4 0 0 4 1 3 2-69. f 8 Years, od. \$\mathscr{L}\$ s. d. 4 4 11 3 19 8 3 18 1 3 11 3 3 14 3 3 9 5 3 10 0 3 8 10 3 9 0 3 17 11 4 0 4 3 16 9 16-61. f 16 Years, 3d. \$\mathscr{L}\$ s. d. 4 8 3 4 6 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1 4 3 1	f 8 Years, Rate of 8 Years = 100. £ s. d. 3 19 1 100 4 0 0 102 3 17 11 99 3 17 6 99 3 17 6 99 3 17 6 99 3 17 6 99 3 17 6 99 3 17 6 99 3 17 6 99 3 17 6 99 3 17 6 99 3 17 6 99 3 17 6 99 3 17 6 99 3 17 6 89 3 19 8 101 4 0 0 102 4 1 3 103 2-69. f 8 Years, Rate of 8 Years = 100. £ s. d. 4 4 11 113 3 19 8 106 3 18 1 104 3 11 3 95 3 14 3 99 3 9 5 92 3 17 11 104 4 0 4 107 3 16 9 102 16-61. f 16 Years, Rate of 16 Yrs. = 100. £ s. d. 4 8 0 103 4 8 3 103 4 6 1 101 4 3 1 97 4 3 8 98 4 2 5 97 4 1 10 96 4 1 5 95 4 1 1 96 4 7 3 102 4 10 6 106	## Rate of Ryears = 100. ## S. d. 3 19 1 100	Rate of 8 Years, Rate of 8 Years, 24 12s. 0d.			

TABLE IV. Continued. — MONTHLY AVERAGES OF MINIMUM RATE OF BANK OF GERMANY.

1846-53.					188	54-61.	
Average Rate of 8 Years, £4 6s. 2d.			Rate of 8 Years =100.	Average Rate of 8 Years, £4 8s. 8d.		Rate of 8 Years = 100.	
	£	s.	d.			£ s. d.	
January	4	7	6	105	January	4 14 2	106
February	4	6	3	104	February	4 9 4	101
March	4	4	5	101	March	4 8 5	100
April	4	5	0	102	April	4 7 6	99
May	4	5	0	102	May	4 6 6	97
June	4	5	0	102	June	4 5 0	96
July	4	7	0	105	July	4 4 0	95
August	4	6	3	104	August	4 3 3	94
September	4	5	0	102	September	4 6 8	98
October	4	7	6	105	October	4 11 5	103
November	4	7	6	105	November	4 13 6	105
December	4	7	6	105	December	4 14 10	107
196	2-69.	-	_		18'	70-77.	1
	2-00.	_					
Average Rate o	f 8 Ye	ars.		Rate of	Average Rate of	of 8 Years	Rate of
£4 12s.	0d.			8 Years	£4 9s.		8 Years
			=100.			=100.	
T	£ 4 1	S.	d. 7	100	Tonnon	£ s. d.	100
January	4	7	6	95	January	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	107
February	4	6	3	94	February	4 0 9 4 0 5	90 89
March	4	6	3	94	March	4 2 6	
April	4 1		4	101	April	4 6 6	92 96
May	4 1		0	101	May	4 4 11	
June			5	100	June July	4 11 3	95 102
July	4 1			93			
August	4	5	8	96	August	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	103 99
September		8	8	107	September		110
October November	4 1		_	107	October November		108
Charles and the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of th			8			4 17 0	
December	4 1	.7	8	106	December	4 17 10	109
184	6-61.				186	62-77.	
Average Rate of		ears	,	Rate of 16 Yrs. = 100.	Average Rate of 16 Years,		Rate of 16 Yrs. = 100.
		_	_	=100.			=100.
January	£ 4 1	s. 0	d. 0	104	January	£ s. d. 4 14 3	103
	4	7	9	100	February	4 4 1	92
February	4	8	5	101	March	4 3 4	91
March	4	6	3	99	April	4 4 4	92
April	4	5	9	98	May	4 9 11	- 99
May	4	5	0	97	June	4 9 11	99
June	4	5	6	98	July	4 11 10	101
July		4	9	97		4 9 2	98
August	4		10	98	August		98
September		9	5	102	September		98
October	4 1	-	6	102	October November		108
November	4 1		2				
December	4 1	T	Z	104	December	4 17 9	107

CHAPTER VII.

SOME OF THE CAUSES WHICH INFLUENCE THE RATE OF INTEREST CHARGED BY THE BANK OF ENGLAND.

A special set of tables has been prepared to illustrate the relation between the reserve of the Bank of England and the current rate of interest. These tables, No. II. and No. VI. of the series, give the average minimum rate of discount for each month in the years 1845-1878, and the corresponding averages of the liabilities and the reserve. The average yearly rate also requires some attention. It is given in col. 38 of Table I.

The average rate of interest charged by the Bank has, after having increased, diminished again during recent years. If we divide the period now under consideration into four groups, between the years 1846-1853, 1854-1861, 1862-1869, 1870-1877, we shall find that the averages of the four groups are as follows:—

		£	8.	d.	
1846-1853	***************************************	3	6	3	
1854-1861		4	15	5	
1862-1869		4	4	8	
1870-1877		3	8	5	

It is also curious to observe that there is a periodic

fluctuation from one season of the year to another. The details are as follows:—

Average, Month by Month, of the Rate of Interest Charged by the Bank of England for the Years 1846-53, 1854-1861, 1862-1869, 1870-1877.

Average Rate for Years, 1846 £3 6s. 3	-1853,	Average Rate for the Eight Years =100.	Average Rate for Years, 1854- £4 15s.	1861,	Average Rate for the Eight Years =100.
January February March April May June July August September October November December	£ s. d. 3 3 11 3 3 9 3 4 9 3 4 7 3 5 0 3 5 3 5 5 0 3 6 3 3 6 3 3 11 3 3 12 4 3 7 7	96 96 96 97 98 98 98 100 100 107 109	January February March April May June July August September October November December	£ s. d. 5 2 8 4 18 6 5 0 9 4 16 4 5 1 11 4 11 8 4 7 10 4 1 2 4 2 5 4 13 11 5 4 11 5 3 5	106 103 105 101 106 96 92 87 85 99 110 108
Average Rate for the Eight Years, 1862-1869, £4 8s. 8d.		Average Rate for the Eight Years =100.	Average Rate for Years, 1870- £3 8s. 5	1877,	Average Rate for the Eight Years =100.
January February March April May June July August September October November December	£ s. d. 4 10 2 4 4 5 3 19 3 3 19 3 4 13 9 4 7 10 4 4 5 3 15 3 4 1 11 4 6 7	106 99 93 93 111 104 99 99 89 96 102 104	January February March April May June July August September October November December	£ s. d. 3 11 2 3 1 1 3 4 1 3 2 9 3 9 11 3 5 10 2 18 10 3 0 1 2 15 8 4 2 8 4 10 11 3 18 1	104 89 94 91 102 96 86 88 81 121 133 114

In all the four periods into which this estimate is thus divided, the latter half of the year is the time of the highest charges. This is what we might naturally expect. The autumn and early winter months are the times of greatest business activity. The demands which the home harvest brings are great; the demands which foreign supplies of all kinds entail are more pressing still. The large amounts of produce then coming forward affect the money market; and a deficient har-

vest (should there be a short supply) usually manifests itself about the third week in October. The shipments of corn also from America generally commence early in September, and intensify up to the middle of November. These causes, and others of a kindred nature which there is no need to specify, account for the autumnal demand. They do not, however, exist in the spring. month of May, a corresponding, though slighter, increase of pressure may be observed to that taking place in October, November, and December. The opening of those sources of supply which have been locked up by the severity of the winter probably accounts for a considerable part of the increased demand for money indicated by a rise in its value Some effect also must be assigned to the periodic increase in the Scotch note circulation in the months of May and November. increase in that circulation beyond the limits fixed by the legislation of 1844 and 1845 causes an immediate demand on the reserve of the Bank of England for gold. The increase in the Scotch circulation beyond the limit of 1845 did not become very distinctly marked till 1856. It has become very much more considerable of It will be observed that the rate in May was for the years 1844-53 but little above that of every other month in the first half of the year. For the years 1870-78 the rate in May was usually higher than in any other month of the first half of the year, except January. The particulars of the Scotch circulation in May, November, and December, for the years 1875-78 are as follows:—

AUTHORISED LIMIT OF SCOTCH BANK NOTE CIRCULATION, £2,749,271.

Average of 1875, £0,000,909.	
1875.	Actual Circulation.
15th May	6,096,052
2nd October	6,098,987
30th ,	
27th November	
25th December	6,277,658
Average of 1876, £6,098,543.	
1876.	£
13th May	
28th October	6,174,510
25th November	
23rd December	6,614,751

Average of 1877, £6,115,859.

1877.	£
12th May	6,051,550
27th October	
24th November	6.755.719
22nd December	6,204,384

Average of 1878, £5,840,533.

1878.	£
11th May	5,788,435
26th October	5,788,136
23rd November	6,404,359
21st December	6,200,097

It may be desirable to mention here the causes which lead to these periodic, though temporary, requirements for notes in Scotland.

- "The main causes of the increased note issues in May and November are undoubtedly these:—
 - "1st. The payments of rents and interests on mortgages, which, in Scotland, are almost uniformly made at the half-yearly terms of Whitsuntide (15th May), and Martinmas (11th November).
 - "2nd. The settlement of all important transactions in heritable property, which are also fixed for the same terms.
 - "3rd. The payment of household servants' wages, and in many cases salaries at the same period.
- "These payments are to a large extent made through the medium of bank notes, and thus they get into hands where they remain for a time, many of the parties who receive the notes having no bank account.
 - "It is further to be noted:-
 - "1st. That on the 4th of the month an unusually large amount of bills falls due, and if the 4th happens on a Saturday (the day when the returns are made up) we generally look for a heavier return on that account.

- "2nd. The November returns are usually heavier than those in May, because of the requirements of the harvest, travellers, &c.
- "3rd. In the country districts the term-day is in many places regulated by the old style, and thus the payment of farm rents run on into June and December.
- "4th. The great increase this year is, no doubt, chiefly owing to the higher scale of wages, particularly in the mining districts, among the most improvident class of working people."

This statement is quoted from a description of the circumstances written in 1872 by a well-known Scotch banker.

It becomes desirable to recapitulate at this point the monthly fluctuations in the rate of discount charged by the Bank of England, and to compare them with the corresponding fluctuations in France and Germany. The rates of the Banks of England, France, and Germany have therefore been tabulated in a similar manner for the years 1846 to 1877, and divided into periods of eight years and of sixteen years. While these tables show a distinct pressure on the Bank of England in May, and in some degree in November, the other Banks do not appear to experience the same influence. The inference seems to be that the Scotch demand in May and November is of sufficient importance to affect the rate of the Bank of England. If we refer to Table II., at pages 31-32, which contains a summary of the monthly averages of the liabilities and reserve of the Bank of England for the years 1845-78, we shall find that the liabilities of the Bank have been on an average at the lowest point in the months of May and November; that the reserve is then comparatively weak, and the proportion of the reserve to the liabilities low likewise. It is probable that there is some connection between the Scotch demand and these circumstances. This is supported by a reference to the returns of the Clearing

House when tabulated, so as to show the amount of business passing in each month of the year. The particulars from 1868 to 1878 are given in Table V., at the end of this chapter, at pages 64, 65. Those figures certainly do not show any exceptional demand in the months of May and November, and as this is not traceable in the ordinary course of business of this country, or in the rate charged by the banks of the two other countries, the inference is that the fluctuations shown to exist at the Bank of England at those periods are influenced in an appreciable degree by the Scotch demand.

This was noticed as far back as 1856 by Mr. T. M. Weguelin, who was at that time governor of the Bank. Mr. Weguelin observed in a letter to the Chancellor of the Exchequer (Sir G. C. Lewis) on the effect of this demand:

"Now with regard to the oscillation of the internal circulation of the country, I may notice that there is, periodically, a demand for currency from the Scotch and Irish banks, which, whilst it produces a most sensible effect upon the Bank of England reserve. is uncontrollable by any action of the Bank. At certain periods of the year, especially of the harvest, the demand for currency commonly greatly exceeds the authorised issue; and as the excess must be issued on gold deposited in certain specified places, that gold is withdrawn from the Bank reserve, to be again restored to it when the reflux of the currency of the Scotch and Irish banks takes place, which is usually in the months of December to March. The Scotch banks very generally exceed their authorised aggregate issue; but with the Irish banks, although the aggregate issue is not usually exceeded, yet it often happens that some are in excess, whilst others are under the authorised amount. But as each bank has to provide for its own excess, the demand on the London bullion reserve is as great as if the whole Irish circulation had gone beyond its limit."

The fluctuations in the circulation of notes in Ireland have been rarely so important as to produce a very marked effect in the way of requiring extra sums of gold to cover them since 1857; but, on the other hand, the note circulation in Scotland, and the periodical fluctuations in the same, have undergone a great increase since

that date.

It would certainly appear to be desirable to mitigate the influence which these demands of a strictly domestic and home character exert. A better arrangement would

provide what the existing law does not provide—a real security for the Scotch issues, without allowing these periodic and strictly temporary demands to press so sharply on the central reserve. This point should be attended to, and at the same time security should also be required for the English country note issues. Opinions are sometimes expressed that it would be a desirable thing to take away the rights of issuing notes possessed by some country bankers, and to substitute instead the notes of the Bank of England. It appears, however, that the only result of such a change, under existing circumstances, would be to concentrate the pressure in any time of difficulty, even more than at present, on the reserve of the Bank of England, to increase the fluctuations in the rate of interest, and to cause higher rates to prevail. And there is no doubt that the existing note issues of the country banks, properly secured, and with adequate and special reserves held against them, might be made of greater service than they now are in carrying on the business of the country.

TABLE IV.—Monthly Averages of Minimum Rate of Discount of Banks of England, France, and Germany for the Eight Years, 1846-53, 1854-61, 1862-69, 1870-77, and for the Sixteen Years, 1846-61, and 1862-77.

£ s. d. 3 3 11 3 3 9 3 3 4 7	Rate of 8 Years = 100.	Average Rate of £4 15s.		Rate of 8 Years =100.
3 3 11 3 3 9 3 3 9		-		100.
3	96 97 98 98 98 100 100 107 109 102	January February March April May June July August September October November December	£ s. d. 5 2 8 4 18 6 5 0 9 4 16 4 5 1 11 4 11 8 4 7 10 4 2 5 4 1 2 4 13 11 5 4 11 5 3 5	106 103 105 101 106 96 92 87 85 99 110
62-69.		183	70-77.	
f 8 Years,	Rate of 8 Years =100.	Average Rate of	of 8 Years,	Rate of 8 Years =100.
£ s. d. 4 10 2 4 4 5 3 19 3 3 19 3 4 13 9 4 7 10 4 4 5 4 4 6 3 15 3 4 1 11 4 6 7 4 8 7	106 99 93 93 111 104 99 99 89 96 102 104	January February March April May June July August September October November December	£ s. d. 3 11 2 3 1 1 3 4 1 3 2 9 3 9 11 3 5 10 2 18 10 3 0 1 2 15 8 4 2 8 4 10 11 3 18 1	104 89 94 91 102 96 86 88 81 121 133 114
16-61.		186	32-77.	
	Rate of 16 Yrs. =100.		Rate of 16 Yrs = 100.	
£ s. d. 4 3 3 4 1 1 4 2 3 4 0 6 4 3 6 3 18 5 3 16 5 3 14 4 3 13 11 4 2 7 4 8 8	103 100 102 99 103 97 94 92 91 102	January February March April May June July August September October November	£ s. d. 4 0 8 3 12 9 3 11 8 3 11 0 4 1 10 3 16 10 3 11 8 3 12 3 3 5 5 4 2 3 4 8 9	105 95 93 93 107 100 94 85 107 116
	3 5 0 3 6 3 3 6 7 3 11 3 3 12 4 3 7 7 32-69. If 8 Years, 8d. & s. d. 4 10 2 4 4 5 3 19 3 3 19 3 4 13 9 4 7 10 4 4 6 3 15 3 4 1 11 4 6 7 4 8 7 4 6 7 4 8 7 4 6 3 15 3 4 1 11 4 6 7 4 8 7 4 1 1 1 4 2 3 3 4 1 1 1 4 2 3 3 1 8 5 3 1 6 5 3 1 4 4 3 13 11	3 5 0 98 3 6 3 100 3 6 7 100 3 11 3 107 3 12 4 109 3 7 7 102 32-69. If 8 Years, Rate of 8 Years = 100. £ s. d. 4 10 2 106 4 4 5 99 3 19 3 93 3 19 3 93 4 13 9 111 4 7 10 104 4 4 5 99 4 4 6 99 3 15 3 89 4 1 11 96 4 6 7 102 4 8 7 104 46-61. If 16 Years, Od. £ s. d. 4 3 3 103 4 1 1 100 4 2 3 102 4 0 6 99 4 3 6 103 3 18 5 97 3 16 5 94 3 14 4 92 3 13 11 91 4 2 7 102 4 8 8 109	3 5 0 98 July	3 5 0 98 July

TABLE IV. Continued. — MONTHLY AVERAGES OF MINIMUM RATE OF BANK OF FRANCE.

		BANK OF	FRANCE.				
184	6-53.		1854-61.				
Average Rate of £3 18s.		Rate of 8 Years =100.	Average Rate of £4 12s.	Rate of 8 Years =100.			
January February March April May June July August September October November December	£ s. d. 3 19 1 4 0 0 3 17 11 3 17 6 3 17 6 3 17 6 3 17 6 3 17 6 3 17 6 3 17 8 4 0 0 4 1 3	100 102 99 99 99 99 99 99 99 101 102 103	January February March April May June July August September October November December	£ s. d. 4 17 0 4 16 5 4 14 4 4 8 9 4 9 7 4 4 6 3 4 5 4 4 14 10 5 1 0 4 18 3	105 105 102 96 97 95 94 93 92 103 110		
186	2-69.		187	0-77.			
Average Rate o		Rate of 8 Years =100.	Average Rate o £4 4s. 1		Rate of 8 Years =100.		
January February March April May June July August September October November December	£ s. d. 4 4 11 3 19 8 3 18 1 3 11 3 3 14 3 3 9 5 3 10 0 3 8 10 3 9 0 3 17 11 4 0 4 3 16 9	113 106 104 95 99 92 93 92 92 104 107 102	January February March April May June July August September October November December	£ s. d. 4 8 9 4 7 10 4 5 6 4 2 10 4 2 3 3 18 9 3 19 10 4 4 6 4 5 0 4 9 7 4 7 6	104 103 100 98 97 92 94 99 100 101 105 103		
184	16-61.	(186	2-77.			
Average Rate of £4 5s.	f 16 Years, 3d.	Rate of 16 Yrs. = 100.	Average Rate of £3 19s.		Rate of 16 Yrs. = 100.		
January February March April May June July August September October November December.	£ s. d. 4 8 0 4 8 3 4 6 1 4 3 1 4 3 8 4 2 5 4 1 10 4 1 1 4 7 3 4 10 6 4 9 9	103 103 101 97 98 97 96 95 95 102 106 105	January February March April May June July August September October November December	£ s. d. 4 6 10 3 13 9 4 1 3 17 0 3 18 3 3 14 1 3 14 11 3 16 8 3 17 0 4 2 3 4 4 11 4 2 1	109 92 102 96 98 92 94 96 103 106 103		

TABLE IV. Continued. — MONTHLY AVERAGES OF MINIMUM RATE OF BANK OF GERMANY.

<i>16−53</i> .			1854–61.				
	rs,	Rate of 8 Years =100.	Average Rate o	of 8 Years, 8d.	Rate of 8 Years =100.		
4 7 4 6 4 4 5 4 5 4 7 4 6 4 7 4 7	6 3 5 0 0 0 0 3 0 6 6	105 104 101 102 102 102 105 104 102 105 105	January February March April May June July August September October November	£ s. d. 4 14 2 4 9 4 4 8 5 4 7 6 4 6 6 4 5 0 4 4 0 4 3 3 4 6 8 4 11 5 4 13 6	106 101 100 99 97 96 95 94 98 103 105		
	6	105	11		107		
52–69.			187	70-77.			
Average Rate of 8 Years, £4 12s. 0d.				Rate of 8 Years =100.			
4 12 4 7 4 6 4 13 4 15 4 12 4 5 4 19 4 17	7 6 3 4 0 5 8 8 1 8	100 95 94 94 101 103 100 93 96 107 108 106	January February March April May June July August September October November December	£ s. d. 4 16 0 4 0 9 4 0 5 4 2 6 4 6 6 4 4 11 4 11 3 4 12 8 4 9 2 4 18 4 4 17 0 4 17 10	107 90 89 92 96 95 102 103 99 110 108 109		
10-01.				00-11.			
f 16 Yea 5d.	ers,	Rate of 16 Yrs. =100.		Rate of 16 Yrs. = 100.			
4 10 4 7 4 8 4 6 4 5 4 5 4 4 4 5 4 9	0 9 5 3 9 0 6 9 10 5	104 100 101 99 98 97 98 97 98 102 103	January February March April May June July August September October November	£ s. d. 4 14 3 4 4 1 4 3 4 4 9 11 4 9 11 4 11 10 4 9 2 4 8 11 4 8 9 4 18 4	103 92 91 92 - 99 99 101 98 98 97 108		
	2d. £ s 4 76 4 4 4 5 5 4 77 4 6 6 4 77 4 7 62-69. f 8 Year od. £ s 4 12 4 17 4 6 6 4 13 4 15 4 19 4 19 4 17 46-61. f 16 Yea 5d. £ s 4 10 4 5 5 4 10 4 5 5 4 10 4 10	## S. d. ## 5. d. ## 5. d. ## 5. d. ## 5. d. ## 5. d. ## 5. d. ## 5. d. ## 6. d. ## 7. 6. ## 7. 6. ## 7. 6. ## 7. 6. ## 7. 6. ## 8. d. ## 12. 7. ## 7. 6. ## 8. d. ## 12. 7. ## 13. 4. ## 12. 5. ## 13. 4. ## 14. 12. 5. ## 14. 12. 5. ## 14. 13. 8. ## 14. 13. 8. ## 14. 14. 15. 8. ## 14. 15. 8. ## 14. 15. 8. ## 15. 6. ## 16. 61. ## 16. 4. 4. 5. ## 16. 61. ## 16. 4. 5. 10. ## 16. 4. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16. 5. 10. ## 16.	of 8 Years, 2d. \$\begin{align*} \text{Rate of 8 Years} & = 100. \\ \begin{align*} \pi & \text{s. d.} & 105 & 105 & 104 & 104 & 104 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105 & 105	## Average Rate of 8 Years = 100. ## \$\frac{2}{4}\$ s. d.	Average Rate of 8 Years, £4 8s. 8d. \$\frac{x}{2}\text{d}\$		

TABLE V.—Bankers' Clearing House Returns, 1868-1878. Arranged so as to Show the Amount of Business Passing Through the Clearing House in each Month of the Year.

Amount of Yea Weekly Average,				869. r, £3,601,676,00 £69,263,000 =	00. 100.		
Weekly Avera	age in Months	of	Weekly Average in Months of				
	£		- 1	£			
January	62,569,200	96	January	69,933,000	101		
February	65,565,750	100	February	72,533,500	105		
March	66,276,000	101	March	73,395,400	106		
April	66,740,600	102	April	70,375,000	101		
May	60,474,500	92	May	67,652,000	98		
June	65,802,750	100	June	67,663,000	98		
July	68,612,800	105	July	70,428,500	102		
August	66,087,000	101	August	68,489,000	99		
September	61,732,400	94	September	63,408,000	92		
October	64,569,500	99	October	71,227,750	103		
November	68,038,250	104	November	68,244,000	98		
December	68,103,000	104	December	68,762,600	99		
Amount of Yea Weekly Average,				871. ar, £4,787,217,00 £92,061,865 =			
Weekly Avera	age in Months	of	Weekly Average in Months of				
	£			£			
January	80,264,750	107	January	78,378,250	85		
February	79,078,250	105	February	81,901,750	89		
March	79,233,800	106	March	85,587,600	93		
April	71,934,000	96	April	88,825,000	96		
May	76,056,500	101	May	90,383,000	98		
June	75,536,600	101	June	82,309,000	89		
July	86,226,250	115	July	103,400,000	112		
August	73,354,200	98	August	92,522,000	100		
September	63,539,750	85	September	97,609,250	106		
October	71,584,750	95	October	106,569,250	116		
November	74,085,800	99	November	98,099,800	107		
December	69,759,000	93	December	99,571,250	108		
	872.		li .	1873.			
Amount of Yes Weekly Average,	ar, £5,903,720,0 £113,533,076 =	000. = 100.	Amount of Ye Weekly Average,	ar, £6,161,500,0 £116,254,717 =	00. = 100.		
Weekly Aver	age in Months	of	Weekly Aver	age in Months	of		
	£	1		£			
January	121,418,800	107	January	121,166,800	104		
February	106,263,250	93	February	124,083,250	107		
March	119,238,750	105	March	122,253,000	105		
April	106,968,750	94	April	115,302,400	99		
May	110,579,600	97	May	111,203,000	96		
June	112,854,250	99	June	111,864,250	96		
July	127,685,600	112	July	119,564,400	103		
August	111,564,000	98	August	115,660,000	100		
September	108,025,750	95	September	104,408,250	90		
October	117,493,000	103	October	115,498,000	100		
	103,991,000	91					
November	100,991.000	91	November	118,251,500	102		

TABLE V. Continued.—Bankers' Clearing House Returns, 1868-1878.

Arranged so as to Show the Amount of Business Passing Through the Clearing House in each Month of the Year.

000. = 100.	1875. Amount of Year, £5,646,993,000. Weekly Average, £108,734,000 = 100.					
of	Weekly Average in Months of					
101 102 103 99 98 101 103 95 103 96 98	January 120,393,000 February 123,265,000 March 120,125,000 April 110,022,000 May 111,180,000 June 107,083,000 July 105,108,000 August 101,123,000 September 101,075,000 October 99,905,000 November 106,080,000	110 113 110 101 102 99 97 93 93 93 92				
98 000. = 100.	1877. Amount of Year, £5,004,991,					
	= 100. of 101 102 103 99 98 101 103 95 103 96 98 98 98	Amount of Year, £5,646,993,0 Weekly Average, £108,734,000 = 101				

Weekly Average	in	Months of	
----------------	----	-----------	--

-	£	
January	113,179,000	118
February	105,200,000	110
March	100,144,000	105
April	99,104,000	104
May	97,729,000	102
June	82,067,000	86
July	98,854,000	103
August	86,982,000	91
September	85,778,000	90
October	92,366,000	96
November	93,108,000	97
December	91,237,000	95

1878. Amount of Year, £5,005,248,000. Weekly Average, £96,254,000 = 100.

Weekly Average in Months of

	l £	
January	100,805,000	10 4
February	100,329,000	104
March	104,129,000	108
April	97,087,000	101
May	92,823,000	96
June	100,112,000	104
July	111,209,000	115
August	91,737,000	95
September	91,477,000	95
October	94,132,000	9 8
November	81.344.000	84
December	86.384.000	90

Weekly Average in Months of

	£	1
January	102,107,000	106
February	98,496,000	102
March	99,694,000	104
April	91,762,000	96
May	95,752,000	100
June	94,698,000	98
July	101,247,000	105
August	90,427,000	94
September	91,340,000	95
October	101,204,000	105
November	93,999,000	98
December	93,149,000	97

Weekly Average in Months During the Eleven Years, 1868-78.

Average of Eleven Years, 1868-78, £94,589,319 = 100.

	£	
January	98,207,641	10 4
February	97,573,977	103
March	98,815,322	10 4
April	93,694,231	98
May	93,234,872	98
June	92,314,032	97
July	100,894,413	106
August	91,453,654	96
September	89,576,127	94
October	94,919,454	100
November	92,475,486	97
December	91,912,627	97

CHAPTER VIII.

VARIATIONS IN THE RATE CHARGED BY THE BANK OF ENGLAND FROM 1844 TO 1878.

THOUGH the rate of discount charged by the Bank of England is, perhaps, no longer at the present time so close a guide to the market value of money as it formerly was in years past, yet it is still a most valuable index to the fluctuations in that market, and to the course of monetary affairs generally, and an examination into the variations of the rate charged is a necessary part of an analysis of the transactions of the Bank. The tables which will be found at the end of this chapter have been prepared from sources which may be relied on for their accuracy. Of these tables, the first, No. VI., gives the average rate of discount charged month by month by the Bank of England during the period from 1845 to 1878; it also shows the proportion which the rate charged in each month bore to the average rate of the year. Summary tables, at page 109, show the average monthly rates for the seventeen

years, 1845-61, 1862-1878, and for the whole period, 1845 to 1878. Table No. VII., pages 78-9, gives at one view a statement of the changes in the Bank rate from the date in 1844, when the Bank Act came into operation, to the close of the year 1878. It gives the number of changes of the rate in each year, and the total number of days at each rate in each year. A supplementary Table, No. XIII., page 110 is added, giving the number of days at each rate, arranged from the lowest rate to the highest; and the number of days at each rate, arranged from the greatest number of days which each rate lasted to the smallest.

These tables thus form, collectively, a kind of rough chart, showing the course which the market value of money has taken during the entire period over which they extend. Some curious information can be gathered from examining them. First, there is the greatest difference, as will be seen at a glance, between the course of business in one year and another. In one year, 1851, no change is marked; in each of the years 1846, 1849, and 1850, there is but one alteration of the rate; in the year 1873 no less than twenty-four changes, one nearly every fortnight, are marked. Next, if we look down the column in the table giving the total number of changes in the Bank rate, we shall be struck with the fact of how much that number has increased. far down as the year 1860 the changes are comparatively few in number. Yet the period from 1844 to 1859 included two panics, those of 1847 and 1857, both of them of considerable severity. In both of these years, 1847 and 1857, the changes in the Bank rate amounted to nine in number. This was considered in those days an almost unprecedented number of variations. If we exclude these two years, we shall find in the earlier period under observation, namely, that from 1844 to 1860, only two years, 1855 and 1856, in which the number of changes amounted to seven in each; two years besides, 1853 and 1858, in which they were six in number; in one year, 1859, there were five changes; and in the remaining years the number of changes varied

from one to three; in one year, 1851, there was actually no change whatever recorded. But in the part of the table dealing with the period closer in date to the present time, we shall find that a totally different state of things prevails. If we carry our eyes down this later part of the column we shall find that, with the exception of the year 1862, in which there were five changes, no year from 1860 onwards has less than ten changes recorded as occurring in it, with the exception of those years which, like 1867, 1868, 1869, and again 1876 and 1877, were years of great commercial depression. In one vear in recent times, 1873, as mentioned before, no less than twenty-four changes are recorded, and an average of a variation once in every month will be seen to be not an uncommon thing. The year 1879, in which up to the month of April no less than four changes have been announced, may possibly equal many of its predecessors, if the remaining portion of the twelvemonth follows the same course in the rapidity and the greatness of its fluctuations.

Further, if we examine the smaller tables we shall find that during the greater part of the time the rate charged by the Bank has been, comparatively speaking, a low one. Out of 12,535 days under consideration, the Bank rate stood at 3 per cent., or below it, during 6.118—that is to say, during nearly half out of the whole number. And if we take the rates up to 4 per cent. inclusive, which we may call moderate rates, as even 4 per cent. can hardly be called a high rate, we shall find that they comprise two-thirds of the whole. A column has been added to the two smaller tables for facility of comparison, showing the proportionate part of the time which each rate has stood at, reckoning the whole period as equalling 1,000. This column shows us that during more than one-fifth of the whole time a rate of 3 per cent. has been charged, and that rates varying from 41 per cent. to 10 per cent. have been in force during one-third of the whole period. The whole results may be summarised thus:—From 1844 to 1878, a low rate, from 2 per cent. to 21 per cent., was charged during about one-quarter of the time; a moderate rate, not exceeding 3 per cent., was charged during nearly half the time; a rate not exceeding 4 per cent. was charged during two-thirds of the time; and during one-third of the time a high rate of $4\frac{1}{9}$ per cent. and

upwards was charged.

If we look to the larger table again, we shall see a fact expressed very clearly, the force of which every one whose business is to deal in money has experienced during the last few years, namely, that the number of days at the higher rates has been greater in the more recent periods. If we except the panic year, 1847, we shall never find, down to the year 1853 inclusive, the rate exceeding 5 per cent.; and indeed a 5 per cent. rate was then most rarely attained. In those days a 4 per cent. rate was one of unusual severity. In the latter part of the table the higher rates are the more frequent. Though it may have been but for a week, yet during the last nine years the Bank rate has never failed to reach 5 per cent.; even in such a year as 1876, during which the average rate for the year was but little more than half 5 per cent., being only £2 12s. 1d. for the twelvemonth, and in 1877, in which the yearly average was only £2 18s., the same result occurred. Thus also during the last ten years the Bank rate has always stood for some short time at 4 per cent., while during the first ten years under consideration that rate was only reached three times. Yet, again, it is during the more recent years that extremely low rates continuing over long periods of time have prevailed.

If we take the year 1860, again, as a central point for our investigation, we shall find that the Bank rate only dropped to 2 per cent. during two of the years which preceded it, namely, in 1851 and 1853, and in one of those years, 1853, the rate only stood at 2 per cent. for six days. But in eight of the years since 1860, namely, in 1862, 1867, 1868, 1871, 1875, 1876, 1877, and 1878, the Bank rate has stood at 2 per cent., as well as in the present year 1879. Indeed, out of two years just passed, namely, 1876 and 1877, the

Bank rate has been at 2 per cent. during no less a length of time than 425 days, that is to say, for more than one year out of the two; and in the years 1867 and 1868 the rate was at 2 per cent. for 483 days out of the two years, one year and four months. Therefore, though a very low rate has frequently prevailed during recent years, a very high rate has also been frequently While the fluctuations in the Bank rate of late have been more frequent, they have also been more marked. The variations are thus shown to have been more extreme during the recent periods. Thus, for example, to take instances from the earlier and the later portions of the table, the average rate in 1846 was £3 6s. 6d., but the highest rate in that year was 31; the average rate in 1875 was lower, being only £3 4s. 8d., but the highest rate reached in that year was 6 per cent, though that rate was only charged during seven days, and 5 per cent. was only charged during an equal length of time. It may be added that the proportion of the reserve of the Bank to its liabilities was very much the same during both these years; it was 42 per cent. in 1846, and 43 per cent. in 1875. Though the variations in the rate have been more frequent of recent years, this cannot fairly be ascribed to the fact that the proportion of the reserve to the liabilities has on an average greatly changed during the period under consideration. Nor can the number of the fluctuations in the rate be ascribed in anything but a very general way to the action of the Bank itself. The Bank has been merely, in a great degree, the passive agent for registering the changes in the value of money which have either actually occurred or have been imminent in the outside market. If the Bank has taken the lead in making any change in the rate, it has generally been because it was obvious that the outside rate would conform to the movement, whether the change was a rise or a fall. There have been periods, no question, when the Bank rate has not been in exact harmony with the market rate. Thus, for instance, in the autumn of 1877, the Bank put its rate up to 5 per cent., and kept it there for a period of 49 days, a period of seven weeks, though the market rate did not stand at anything like so high a figure during that time. During this period the Bank was carrying out strictly and honestly one of the most difficult of the important duties with which it is charged, and that is the duty imposed on it through the fact that it is the custodian of the bullion reserve of the country. In the pursuance of this duty the Bank put its rate up, though there was no corresponding disposition to a rise in the outer market, and this action on its part attracted in time sufficient gold to its treasury.

But leaving these exceptional cases on one side, the main point remains, that the fluctuations in the Bank rate represent, broadly speaking, the fluctuations in the market value of money, and further, that these variations tend to increase in number during recent times. and also to become more sharp. As there is no reason for ascribing the fact of these variations to the action of the Bank itself, the reason must be sought in the action of the outside market. Some of the occasions on which high rates have been charged, have been times when bullion has been required for export. Some have been periods when the demand for loanable capital for business purposes has been great. Periods immediately following those years in which great amounts of capital have been set fast, or exported out of the country, are those in which the rates of interest have naturally been In 1847 the large sums set fast in the construction of railways, in 1857 the creation of a considerable number of joint stock companies, in both these periods, and in 1866, over-speculation led to the panics which took place at these respective dates. The greater swiftness with which the panic of 1866 came on, when compared with those which preceded it, was due to the same cause as that which has occasioned the greater susceptibility to fluctuation in the value of money in recent years, namely, the vast growth of loanable capital in the country, and of the money held by banks and discount houses, in comparison with the reserve of ready

money of capital in the form of hard cash which is held against these liabilities. The real reserve in actual cash of the banks of the country is the amount of the reserve held by the Bank of England, and though that reserve has been considerably augmented of late, yet it has not increased in proportion to the demands which may be made upon it. That greater difficulties have not occurred of late years in our banking history is due to the great care taken generally by the Bank of England, which has been careful to adjust its rate in such a manner as to protect the reserve of bullion which it When a demand arises for bullion for exportation without any corresponding demand for loanable capital for discount purposes occurring at the same time, it may become necessary for the Bank to raise the rate which it charges considerably above the market rate in order to protect its reserve. But as the amount of loanable capital outside the Bank of England has till recently increased in a larger proportion than the amount of loanable capital which the Bank holds, it has become more difficult for the Bank to maintain that influence over the market rate which it is needful for it to exert. The more close is the harmony existing between the market rate and the Bank rate the more swiftly is the Bank able to influence the market rate, and thus to regulate the amount of its reserve. The more carefully the business of banking is conducted throughout the country the less will the danger be of those demands which arise through the results of inflation of business and over-trading. The influence which bankers generally can exert over the business of the country is very great, and considering the extreme delicacy of our money market the more needful it is that that influence should be continually exerted on the side of prudence.

This statement will give our readers a clear view of the fluctuations in the rate of interest charged by the Bank of England during the period from 1844 to 1878. We propose in the next two chapters to carry the investigation somewhat further, and to examine in some detail into the rates charged by the Bank of France and the Bank of Germany in a similar manner. A table has been added, marked No. XII., at page 109, which shows at one view the fluctuations in the rates of discount charged by the Banks of England, France, and Germany, for the seventeen years, 1845-1861, 1862-1878, and for the thirty-four years, 1845-1878, collectively. This shows at one view what the course of these fluctuations has been. It will be observed that the last quarter in the year is the period of the greatest business activity throughout Europe; but there is a closer correspondence between the fluctuations in the rates charged in France and Germany, as is natural from the conditions under which business is conducted on the Continent, than between the rates charged in those countries and in England.

TABLE VI.—Monthly Averages of Minimum Rate of Bank of England—1844 to 1878.

ENGLAND—1077 TO 1070.													
						346.		D-4-		1847		D-4-	
Average Y	e Re	te o	of	Rate of	Average Y	R	ate o	of	Rate	Average Rate of Year,			Rate
£2 1	ear, 3s. i	Bd.		Year	£3 6	is.	6d.		Year	£5 3s. 6d.			Year
				=100.					=100.				=100.
_	£	в.	d.		_ 1	æ	8.	d.		_	£ 8		
Jan	2		0	93	Jan		10	0	105	Jan	3 10	-	68
Feb	2 2		0	93 93	Feb March		10 10	0	105 105	Feb March	4 (-	77
March April		10 10	0	93	April		10	0	105	April	4 10		77 88
Мау	2		ŏ	93	Мау		10	ŏ	105	May	5 (97
June		10	ŏ	93	June		10	ō	105	June	5 (-	97
July		10	Õ	93	July	3	10	0	105	July	5 (97
August.	2	10	0	93	August.	3	9	11	105	August.	5 10	0 (106
Sept		10	0	93	Sept	3	0	0	90	Sept	5 9		105
October		15	9	103	October	3	0	0	90	October	6 10		126
Nov	3	6	9	124	Nov	3	0	0	90	Nov	7 12		147
Dec	3	10	0	130	Dec	3	0	0	90	Dec	5 18	3 0	114
	18	3 4 8.			l	1	849.			l	185	0.	
Averag	e Re	te (of	Rate	Average	e R	ate	of	Rate	Averag	e Rat	e of	Rate
Ÿ	ear,		-	of Year	Y Y	ear,	,		of Year	Ÿ	ear,	- 0-	of
£3 1	4s.	5d.		=100.	£2 1	8s.	7d.		=100.	£2 :	10s. 1	ł.	Year =100.
			 -			_		_					
T		8.	d. 0	133	Jan	£ 3	в. О	d. 0	102	Jan	£ 8		100
Jan Feb	4.	19 0	Ö	107	Feb	3	Ö	ő	102	Feb	2 1		100 100
March	4	ŏ	ŏ	107	March	3	ŏ	ŏ	102	March			100
April	4	ŏ	ŏ	107	April	3	ŏ	ŏ	102	April	2 1		100
May	4	ŏ	ŏ	107	Мау	3	ŏ	ŏ	102	Мау	2 1		100
June		14	ō	99	June	3	Ō	Ō	102	June	2 1		100
July	3	10	0	94	July	3	0	0	102	July	2 1	0 0	100
August.	3	10	0	94	August.	3	0	0	102	August.		0 0	100
Sept	3	10	0	94	Sept	3	0	0	102	Sept			100
October		10	0	94	October	-3	0	0	102	October			100
Nov	2	19	9	80	Nov	2	16	5	96	Nov	2 1		100
Dec	3	0	0	80	Dec	2	10	0	85	" Dec	2 1	2 7	105
	18	351.			1	1	852			11	188	i3.	
Averag	e R	ate	of	Rate	Averag	e I	Late	of	Rate	Averag	ge Rai	e of	Rate
Ť	ear.	,		of Year	I) Ÿ	ear	٠,		Year	3	ear,		of Year
£ 3	0s.	0d.		=100.	£2	3s.	0 d.		=100.	23 1	.3 s. 10	d.	=100.
			-		l				·	II			-
Jan	£	s. 0	d. 0	100	Jan	$\frac{\mathcal{L}}{2}$	8. 10	d . 0	116	Jan		s. d. 27	71
Feb	3	Ö	Ö	100	Feb	2	10	0	116	Feb		0 0	81
March		ŏ	ŏ	100	March	2	10	ŏ	116	March .		ŏŏ	81
April	3	ŏ	ŏ	100	April	2	6	7	108	April		ŏŏ	81
May	3	ŏ	ŏ	100	Мау	2	ŏ	ò	93	May	آ ۾ ا	ŏŏ	81
June	3	ō	Ŏ	100	June	2	ō	ŏ	93	June		8 0	92
July	3	Ō	0	100	July	2	0	Ó	93	July	1	o o	95
August.	3	0	0	100	August.	2	0	0	93	August		0 0	95
Sept	3	0	0	100	Sept	2	0	0	93	Sept	4	4 0	114
October	3	0	0	100	October	2	0	0	93	October	, 5	0 0	135
Nov	l _	0	0	100	Nov	2	0	0	93	Nov		0 0	135
Dec	3	0	0	100	Dec	2	0	0	93	"Dec	5	0 0	135

TABLE VI. Continued—Monthly Averages of Minimum Rate of Bank of England.

OF BANK OF ENGLAND.												
	1855.					1856.						
Average Rate of			Rate	Average Rate of Year, £4 17s. 10d.			Ra		Average Rate of Year,			Rate
Year, £5 2s. 3d.			Year	Year,			Yes	ır	Year, £6 1s. 2d.			Year
			=100.	29 178. 10u.				00.	=======================================			=100.
	£ s.	d.		1	£	s. ċ				L 8.	d.	
Jan	5 (_	98	Jan	5	-) 10.	- 1	Jan	7 0	0	115
Feb	5 0	_	98	Feb	5	-) 10.		Feb	7 0	0	115
March	5 0	_	98	March	5 4 1		10		March	7 0	0	115
April May	5 0 5 8		106	April May			$\begin{bmatrix} 5 & 9 \\ 9 & 9 \end{bmatrix}$		April May	7 0 6 15	0	115 111
May June	5 10	-	108	June		-	8	-	June	4 17	0	80
July	5 10		108	July		0 (July	4 10	ŏ	74
August.	5 2		101	August.		0 (August.	4 10	ŏ	74
Sept	5 0		98	Sept	4	3 6	8 8	5	Sept	4 10	0	74
October	5 0	0	98	October		3 6		3	October	6 10	0	107
Nov	5 0		9 8	Nov		0 (Nov	7 0	0	115
Dec	5 0	0	98	Dec	7	0 (143	3 1	Dec	6 9	7	107
1857.				1858.					1859.			
Average Rate of			Rate	Average Rate of			Rat		Average Rate of			Rate
Year,			of Year	Ÿ	Year, £3 4s. 7d.				I Y	ear.		of Year
£6 13s. 3d.			=100.	£3 4s. 7d.			Yea = 10		£2 14s. 7d.			=100.
					£	s. d	-\	-				
Jan	£ s.	d. 0	90	Jan		s. d .8 2		.	Jan	£ s. 2 10	d. 0	91
Feb	6 0	ŏ	90	Feb		0 (- 1	Feb	2 10	ŏ	91
March	6 0	ŏ	90	March		ŏċ			March	2 10	ŏ	91
April	6 7	5	95	April		o d			April	2 10	2	91
May	6 10	0	97	May	3	0 (95	3	May	4 8	6	162
June	6 4	5	93	June		0 0			June	3 3	7	116
July	5 17	5	88	July	-	0 0			July	2 15	6	102
August.	5 10	0	82	August.	-	0 0		- 11	August.	2 10	0	91
Sept	5 10	0	82	Sept	_	0 0 0 0			Sept	2 10 2 10	0	91
October Nov	6 18 9 8	0	103 141	Nov	-	0 0	1	- 1	October Nov	2 10 2 10	0	91
Dec	9 14	5	146	Dec,	2 1	-	1		Dec	2 10	Ö	91
1860.				1861.				-	1862.			
			of	Average Rate of			of	۱ ۱	Average Rate of Year, £2 10s. 7d.			of
£4 3s. 7d.			Year	25	Ÿear, £5 5s. 4d.			r	Year, Y			Year
	- -		=100.	~0	05. 3 0	••	=10	0.	~~ 1	OB. 14.		=100.
	£ s.	d.		1	£	s. d		-1	1	£ 8.	d.	
Jan	2 15	ō	66	Jan	6 1		131	.	Jan	2 13	9	106
Feb	4 0	0	96	Feb	6 1	8 0	131	·	Feb	2 10	0	99
March	4 0	0	96	March	7 1		148		March	2 10	0	99
April	4 14	7	113	April		8 3	103		April	2 10	0	99
May	4 12	5	110	Мау	5 1	- •	106	- 11	Мау	2 13	9	106
June	4 0	0	96	June	-	0 0 0 0	114		June	3 0 2 12	0	119 103
July	4 0	0	96 96	July August.	6 4 1	-	91		July August.	2 12	0	79
August. Sept	4 0	ŏ	96	Sept	3 1		72		Sept	2 0	0	79
October	4 0	ŏ	96	October	3 1				October	2 1	3	81
Nov	5 0	3	120	Nov		1 5	58	- 11	Nov	3 0	ō	119
Dec	4 19	9	119	Dec	3	0 0	57	, 1	Dec	3 0	0	119

TABLE VI. Continued—Monthly Averages of Minimum Rate of Bank of England.

	18	<i>63</i> .				18	864.				18	65.		
Average	Ra	te o	f	Rate of	Year, Od Year				Average	R	ate e	of	Rate	
Ý 6 £4 8	ear,	,a	- 1	Year	297 S	ear,	h.a		Year	£4 1	ar,	1.1		Year
240	98. 4	ж. ——		=100.	27 6		ou.		=100.	Z4 1.	J8.	y u.		=100.
	£	8.	đ.		_	Ł	8.	đ.	404	_		8.	d.	440
Jan		18	6	83	Jan	7	9	9	101	Jan		14	2	119
Feb	4	6	0	97	Feb March	6	18	0	93 81	Feb	5	0	0	105
March	4 3	0 16	0 7	91 87	April	6 6	0 7	6	86	March April	4 4	12 0	2	97 84
April	3	9	5	79	احما	8	7	5	113	اعت	4	8	0	92
May June	4	0	ŏ	91	June	6	8	9	87	June	3	4	Ö	67
July	4,	Ö	ŏ	91	July	6	6	ő	85	July	3	2	5	65
August.	4	ŏ	ŏ	91	August.	8	ŏ	2	108	August.	4	ő	5	84
Sept	4	ŏ	ŏ	91	Sept	8	12	õ	116	Sept		19	7	83
October	4	ŏ	ŏ	91	October	9	õ	ŏ	121	October		14	ó	141
Nov	_	13	9	129	Nov	8	ŏ	2	108	Nov	-	16	3	143
Dec		15	ŏ	176	Dec	6	12	ō	89	Dec	6	4	2	130
			_						2 001 111	_				
	180		•	Rate	1867.				1868.				Rate	
Average	Rε	ite (of	of	Average hate of of				Average	of	of			
£6 1	ear,	ħΛ		Year	Year Year				£2 1	ear			Year	
201	···	vu.		=100.	=100.				202 1	B. J	.ıu.		=100.	
1	£	8.	d.		£ s. d.				1	£	8.	d.		
Jan	8	0	2	115	Jan	3	10	0	138	Jan	2	0	0	95
Feb	7	8	7	103	Feb	2	17	7	113	Feb	2	0	0	95
March		12	0	95	March	3	0	0	118	March	2	0	0	95
April	6	0	0	86	April	3	0	0	118	April	2	0	0	95
May	9	1	2	130	Мау	3	0	9	119	Мау	2	0	0	95
June		0	0	144	June	2	10	0	98	June	2	0	0	95
July		0	0	144	July	2	9	0	96	July	2	0	0	95
August.		18	õ	128	August.	2	0	0	79	August.	2	0	0	95
Sept	5	1	5	73	Sept	2	0	0	79	Sept	2	0	0	95
October	4		0	65	October	2	0	0	79	October	2	0	0	95
Nov	4	1	7	59	Nov	2	0	0	79	Nov	2	3	0	103
Dec			9	56	Dec	2	0	0	79	Dec	3	0	0	143
	18	369.		. 70 :			870.			ii	18	871.		
Average	e R	ate (of	Rate	Averag	e R	cate	of	Rate	Averag	e R	ate	of	Rate
Y	ear.			Year	Y	ear	٠,		of Year	II 🔻	PAT			of Year
£3 4	4 8.	2d.		=100.	£ 3	2s.	0d.		=100.	£2 1	78.	8d.		=100
					ļ									
Tan	£	8. O	d. 0	93	Jan	£		d. 0	97	T	£ 2	8.	d.	87
Jan Feb	3	Ö	ŏ	93	II			Ö	97	Jan Feb	2	10 10	0	87
Feb March	3	Ö	Ö	93	Feb March			Ö	97	Feb March	3			104
April	4	0	ŏ	125	April	3		0	97	April	2	0 13	6 6	93
	4	9	9	140		3		Ö	97		2	10	0	87
May June	4	0	0	125	May June	3		0	97	May June	2	6	7	80
July	3	6	ŏ	103	July	3		2	111	July	1	14	7	60
August.			5	89	August.			7	165	August.	2	0	ó	69
Sept	2	10	ő	78	Sept	I _		6	99	Sept	2	6	7	81
October	2	10	ŏ	78	October			ŏ	81	October	5	9	ó	189
Nov			9	90	Nov	2		ŏ	81	Nov	4	9	3	154
Dec	١ -	ő	ŏ	93	Dec	2		ŏ	81	Dec	3	5	9	114
				, , , , ,					,		, –			

TABLE VI. Continued—Monthly Averages of Minimum Rate of Bank of England.

				OF.	BAN:	K C	E.	ENG	LAND.						
	Year, of					18	373.			1		18	374.		
Y	Rate e ear, 2s. 0d.	of	Rate of Year =100.	i	erag Y £4 1	ear	,		Rate of Year =100.	Aver	Ÿ	ear,		of	Rate of Year = 100.
Jan Feb March April May June July August. Sept October Nov Dec	£ 8. 3 0 3 0 3 14 4 15 3 10 3 5 3 14 5 14 6 9 5 9	d. 0 0 0 0 0 3 0 8 0 8 9 9	73 73 73 90 116 85 79 85 90 140 158 133	Jan. Feb. Mar Apr. May Jun. July Aug Sept. Octo	ch il e ust.	£433456533684	8. 11 10 13 0 5 3 1 7 2 1 2	d. 9 0 0 3 7 7 11 10 5 0	96 73 76 83 110 129 106 71 65 127 169 102	Jan Feb. March April May June July Augus Sept. Octob Nov.	 st. er	3 3 4 2 2 3 3	8. 18 10 10 10 0 16 10 13 0 11 8	d. 9 0 0 5 5 9 0 7 2 0	106 95 95 95 109 76 69 99 81 97 119
	1875.					18	376.				1877.				
Y	Average Rate of Year, £3 4s. 8d. Rate of Year = 100				erage Y £2 1	ear	,		Rate of Year =100.	Aver	Y	ear,		of	Rate of Year =100.
Jan Feb March April May June July August. Sept October Nov Dec	2 4 2 0 3 2 3 11	d. 5 7 0 0 0 0 11 7 0 11 0 10	144 90 108 108 108 108 97 69 62 97 110 96	# # 8 s. d. # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #					2 2 2 2 2 3 2 3 4	s. 0 0 0 0 19 0 6 2 0 12 17 0	d. 0 0 0 0 0 0 0 3 6 0 0 9 0	69 69 69 102 103 79 73 103 158 168 138			
-		18	78.							1845	5-78	8.			
Ave	Average Rate of Year £3 15s. 8d.			Rate of Year = 100.			-	Average Rate of 34 Years, £3 17s. 9d.				5	Rate of 34 Yrs = 100.		
Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanuary Lanu				d. 6 88 0 53 6 57 0 79 6 80 6 67 3 101 125 0 133 0 151 9 149				Iarca April Iay Iune Iuly Augus Septo Octol	uary h l ust	4 2 6					103 96 96 95 104 98 94 94 90 105 114 108

TABLE VII.—BANK OF ENGLAND
TABLE OF THE CHANGES IN THE RATE OF DISCOUNT CHARGED BY THE
YEAR, SINCE 1ST SEPTEMBER, 1844 (when the Bank

	Numi	er of Ch	anges.	2 %	21 %	21 %	3 %	31 %	4 %
Years.	Rise.	Fall.	Total.	Days.	Days.	Days.	Days.	Days.	Days.
1844		1	1		•••	117			•••
1845	2		2		•••	289	21	55	•••
1846	•••	1	1				126	239	•••
1847	6	8	9				14	7	177
1848		3	8				59	140	40
1849		1	1		•••	8 9	326		•••
1850	1		1			360	5		•••
1851							365		•••
1852		2	2	253		113			•••
1853	6		6	6		14	133	91	14
1854	1	1	2		•••		•••		•••
1855	4	4	8		•••			84	7
1856	2	5	7		•••		•••	•••	•••
1857	6	8	9		•••		•••	•••	•••
1858		6	6			22	301	7	7
1859	2	8	5			288	35	14	•••
1860	8	8	11			19	12	•••	226
1861	3	8	11				54	49	21
1862	2	8	5	98		147	120	•••	•••
1863	8	4	12				31	12	241
1864	7	8	15						•••
1865	8	8	16				42	21	98
1866	5	9	14					11	42
1867	•••	8	3	159		56	112	38	•••
1868	2		2	324	•••	14	28	•••	•••
1869	3	4	7			77	183	21	49
1870	4	6	10			93	223	9	12
1871	4	6	10	70	28	124	66	14	23
1872	9	5	14				123	76	50
1873	11	13	24				、 35	76	61
1874	6	7	13			42	70	119	81
1875	5	7	12	56		21	84	147	43
1876	1	4	5	255			14	14	62
1877	4	3	7	170		7	100		89
1878	6	4	10	56	•••	28	91	28	21
	126	138	264	1,447	28	1,870	2,773	1,272	1,314

MINIMUM RATE OF DISCOUNT, 1844-78.

Bank of England, and the Number of Days at Each Rate in Each Act came into Operation), to December 31st, 1878.

4 %	5 %	5} %	6 %	6} %	7 %	8 %	9 %	10 %	Total.	Years.
Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	Tomis.
•••				•••			•••		117	1844
•••	•••	•••		•••			•••	•••	365	1845
•••		•••					•••		365	1846
•••	127	56	46	•••	10	28	•••		365	1847
•••	27				•••	•••	•••	•••	3 66	1848
•••		•••			•••	•••	•••		365	1849
•••							•••		365	1850
•••		•••	•••				•••	•••	865	1851
•••							•••		366	1852
14	93						•••		365	1853
•••	281	84	•••				•••		365	1854
84	102	14			74				365	1855
98	35		20	14	199	•••	•••	•••	366	1856
•••	•••	84	127	77	4	24	4	45	365	1857
•••	14	•••	7	•••	•••	7	•••	•••	365	1858
28		•••	•••		•••	•••	•••	•••	365	1859
33	63		13	•••	•••	•••	•••	•••	366	1860
14	49	•••	91	•••	52	35	•••	•••	365	1861
•••		•••		•••	•••		•••	•••	365	1862
•••	25	•••	27	•••	8	21	•••	•••	365	1863
•••		•••	106	•••	102	81	77	•••	366	1864
52	39	14	49	•••	50	•••	•••	•••	365	1865
42	21	•••	56	•••	37	59	1	96	365	1866
•••	•••	•••				•••	•••	•••	365	1867
•••		•••				•••	•••	•••	366	1868
85				•••	•••	•••	•••	•••	365	1869
7	7	7	7	•••		•••	•••	•••	365	1870
•••	40	•••	•••	•••	•••	•••	•••	•••	365	1871
7	47	•••	44	•••	19		•••	•••	866	1872
43	45		57		22	13	13	•••	365	1873
8	14	•••	81	•••		•••	•••	•••	365	1874
•••	7	•••	7				•••	•••	365	1875
•••	21	•••					•••	•••	366	1876
•••	49					•••			865	1877
•••	104		87						865	1878
465	1,210	259	725	91	577	268	95	141	12,585	

CHAPTER IX.

VARIATIONS IN THE RATE CHARGED BY THE BANK OF FRANCE FROM 1844 TO 1878.

THE last chapter contained a table of the variations in the rate of discount charged by the Bank of England from the date when the Act of 1844 came into force to the present time. That date was selected as the starting point of the inquiry, because before that period it had scarcely been the custom of the Bank of England to make any variation at all in its rate. occasions, particularly in 1839, a higher rate was sometimes charged, but the regular Bank rate was 4 per cent. The market rate might be something very different, but the Bank did not concern itself with that. If the market rate was as high or higher than the Bank rate, the Bank was resorted to for discount purposes; but if the market rate was lower, the Bank did not reduce its rate accord-Earlier than the date from which that table starts—September 5th, 1844—the rate charged by the Bank of England is no guide to the market rate, and hence it was of no service to pursue the investigation further back than that time.

The same date has been taken in the table of the variations of the rate of the Bank of France, which accompanies this chapter, in order to facilitate comparison between the operations of the two banks.

The tables prepared for this purpose correspond exactly with those relating to the Bank of England. first Table, No. VIII., gives the average rate of discount charged month by month by the Bank of France during the period from 1845 to 1877; it also shows the proportion which the rate charged in each month bore to the average rate of the year. A summary Table, page 109, shows the average monthly rates for the seventeen years, 1845-61, 1862-1878, and for the whole period, 1845-78. Table No. IX. gives the number of changes of the rate in each year, and the total number of days at each rate in each year. A supplementary Table, No. XIII., page 110 shows the number of days at each rate, arranged from the lowest rate to the highest, and the number of days at each rate arranged from the greatest number of days which each rate lasted to the smallest.

Before commencing this comparison, it will be desirable to give some description of the organisation of the Bank of France. The direction of the bank consists of the following persons:—First, there is a governor and two sub-governors; all these three are nominated by the Government and are understood to be removable at its pleasure, but this power, as a matter of fact, is not exercised. Then there are fifteen directors, who are elected by the proprietors. Three of these directors must be selected from the class of the receiversgeneral, who are connected with the Government, and the management of the taxes of the country. receveurs-général, or trésoriers payeurs-général, as they are most properly called, are the Government or Treasury Agents in the Departments. Five of the twelve remaining directors must be taken from the merchants, manufacturers, and leading business men in Paris. sides these there are the three censors, who must be chosen from among the men engaged in business and manufactures, and who thus specially represent the

manufactures and the industry of Paris. The governor. the two sub-governors, and the fifteen directors, form the general council. Nothing is done without the presence and the surveillance of the censors, but they have not the right to vote, though they may speak and place their opinions on the minutes of the deliberations. Great part of the detail of the management rests with the two sub-governors, but the directors have the right to decide and vote on any measure which may come The directors are understood to be rather before them. checks on the two sub-governors than to be the actual managers of the business themselves. The system is understood to work well in practice, and the mixture of the more permanent portion of the governing body, which is selected by the Government, with the portion which is selected by the shareholders themselves, is an advantage in enabling a regular system of management to be steadily carried out from year to year. The Bank of France had at the date of its report in 1878, 86 branches situated in all the principal cities and towns of the Some of these branches carry on a very large business, and the amount of the business done by them in the aggregate considerably exceeds that done by the head office at Paris. Some of the branches, however, It was mentioned in the report for 1878 that no fewer than 41 of them were carried on at a loss. Some of these branches had been but recently established; they give collectively very valuable assistance to the trade of the country; and it is certain that without them the position of the bank would be very inferior to that which it holds at the present time. The best description, perhaps, which can be given of the mode in which the business of the bank is carried on is to be found in the evidence given by M. Rouland, the late governor of the bank, before the "Enquête sur les principes et les faits généraux qui régissent la circulation monétaire et fiduciaire," held in Paris in 1865. M. Rouland, in describing the organisation of the governing body of the bank, stated that it consisted of two perfectly distinct elements, being, one, the portion

chosen by the State, and the other chosen by the shareholders. The persons chosen by the State, namely, the governor and the two sub-governors, are, according to M. Rouland's words, bound to see that the business of the bank is carried on for the public advantage. their duty to see that the statutes of the bank are not overstepped, and that the interests of trade and commerce are attended to. It is from them that the proposals to raise or to lower the rate of interest appear almost invariably to proceed. M. Rouland's description was as follows:—"Nothing of any description which concerns the great interests of the public, nothing which concerns the larger duties which the bank has to perform towards commerce and industry, nothing of all that class of business belongs to, or is left to the discretion of what he called the interested party." By this M. Rouland understood that portion of the governing body which directly represented the shareholders.

"This is a guarantee," M. Rouland continued, "which ought, of itself, to satisfy any who have any doubts on the subject. Does the public know it? Are the public aware that during sixty-two years it has not perhaps happened twice that the council has had to propose that the rate of discount should be raised or lowered? Does the public know that it is always the active element of the Government, which, watching vigilantly over the public interest, has made the proposition?" M. Rouland proceeded to say that the two portions of the governing body have always worked together in the most perfect harmony, and that in this harmony of the two portions of the governing body the security of the institution consists. M. Rouland spoke, and with a just sense of pride, of the part which the Bank of France had always taken in developing the commerce and industry of that country. Opinions have, however, been occasionally expressed that the commercial element is not sufficiently represented in the general council of management of the bank, and that it would be desirable to choose a greater number of representatives of various branches of business to form part of the direction.

This opinion is referred to here, but it is only right to add that the Bank of France has for many years appeared to carry on its business with great intelligence and judgment in many of the most essential points, and in particular its management during the period of suspension of specie payments in France, a period of the greatest difficulty, was a brilliant example of what the conduct of a bank should be under exceptionally trying circumstances.

The business of banking has not, it must be remembered, hitherto reached in France anything like the same proportions which it has done in Great Britain and Ireland. There are very few banks in France at all to be compared with the larger banks of England, Scotland, and Ireland. The "Comptoir d'Escompte," the "Credit Lyonnais," and the "Société Générale," and a few others, principally in the larger towns, obtain doubtless their share of the business—but no bank in France possesses anything like the organisation of the Bank of France, and its position is in this respect a very different

one from that of the Bank of England.

The amounts of the balances kept by other banks with the Bank of France have never been published in the same manner as those kept by the London bankers with the Bank of England, and hence it is not possible to speak on the subject with the same certainty; but it is not likely that they approach anything like the From both these reasons, and from the same sums. general circumstances of the trade of the country, the Bank of France is not exposed to anything like the same sudden demands as the Bank of England. current of commercial activity in France, flows with a very different and more equable course than in Eng-A country which depends so greatly on agriculture as France, where manufactures, commerce, and trade with other countries fill relatively so much smaller a space in the general activity of the people than in England, will always be likely to follow a more undisturbed course in the way of business than is, or can be. the case here. There are much fewer causes to lead to

the vast demands for bullion for export which occasionally operate so suddenly and so powerfully on our The sums on deposit with banks in France are, beyond question, both smaller in proportion to the numbers and to the general wealth of the population than in England, and they are also more generally deposited for longer periods than with us, and are much less likely to be suddenly required to be repaid. these circumstances unite in causing the demands on the Bank of France to be of a totally different description from the demands on the Bank of England, and it is only natural to find that this difference is reflected in the variations of the rate of interest charged by the two banks. The average rate of discount charged by the Bank of France has been rather higher than that charged by the Bank of England for the period under consideration, but the duration of extremely high rates has been much shorter. Thus, the rate of the Bank of France has been oftener at 4 per cent. during the period under notice than at any other rate, and next to that rate 5 per cent. shows the highest proportion. firm which had done business with the Bank of England would have been able to have its bills discounted at 3 and 2½ per cent. for fully an equal length of time as it would have been charged 4 per cent. by the Bank of France. The rate ruled at 3 per cent. for 2,773 days with the Bank of England, while it only stood at that rate for 1,594 days with the Bank of France, and while the Bank of England has charged 2 per cent. for 1,447 days, the same rate was charged by the Bank of France for 559 days only. But in the highest rates of all, the customers of the Bank of France would have had the advantage. The Bank of France has never raised its rate to 10 per cent., but the Bank of England has charged that rate for 141 days. The Bank of France charged 9 per cent. for 16 days only, but the Bank of England did so for 95 days, and while the French rate has been 8 per cent. for 41 days only, the rate of the Bank of England was at that point for 268 days.

The number of variations in the rate has been much

TABLE VI. Continued—MONTHLY AVERAGES OF MINIMUM RATE OF BANK OF ENGLAND.

	180	6 3 .		1	Average hate of of				Average Rate of					
Average	Re	to o	f	Rate	Year, of					Average	R	ate o	of	Rate
Y	ear,	ve 0	٠	of				^		Y	ear,		^	of
₽4 8	3s. 2	d.	- 1	Year =100.	£7 8	Bs. (d.		=100.	£4 1	58.	4d.	- 1	Year ==100.
			_					_					_	
_ 1	£	8.	d.		_ 1	Æ	8.	d.		_ 1		8.	d.	
Jan		8	6	83	Jan	7	9	9	101	Jan		14	2	119
Feb	4	6	0	97	Feb	6	18	0	93	Feb	5	0	0	105
March	4	0	0	91	March	6	0 7	0	81	March		12	2	97 84
April	3 1	16 9	7 5	87 79	April May	6 8	7	6	86 113	April May	4	0 8	0	92
May June	4	0	ŏ	91	June	6	8	9	87	June	3	4	ŏ	67
July	4	ŏ	ŏ	91	July	6	6	ŏ	85	July	3	2	5	65
August.	4	ŏ	ŏ	91	August.	8	ŏ	2	108	August.	4	ō	5	84
Sept	4	ŏ	ŏ	91	Sept	8	12	ō	116	Sept		19	7	83
October	4	Ŏ	0	91	October	9	0	0	121	October		14	0	141
Nov	5	l3	9	129	Nov	8	0	2	108	Nov	6	16	3	1 43
Dec	7	15	0	176	Dec	6	12	0	89	Dec	6	4	2	130
	186	66.		1	1867.				i	18	368.			
A				Rate	Average Rate of Rate				A	- 6	Rate			
Averag	e na ear,	te c)I	_of	Year, Year				Averag	e r. ear		OI	of	
£6 Î	98.	0 d .		Year =100.	22 10s. 9d. Year =100.				£2 1				Year =100.	
				=100.	=100.							=100.		
_ 1	£	8.	d.		£ s. d.						£	8.	d.	
Jan	8	0	2	115	Jan		10	0	138	Jan	2	0	0	95
Feb	7	3	7	103	Feb	2	17	7	113	Feb	2	0	0	95
March		12	0	95 86	March	8	0	0	118 118	March	2	0	0	95 95
April May	6	0 1	2	130	April May	3	0	9	118	April May	2 2	0	0	95
June		ō	õ	144	June	2	10	0	98	June	2	ő	Ö	95
July		ŏ	ŏ	144	July	2	9	ŏ	96	July	2	ŏ	ŏ	95
August.		18	Ŏ	128	August.	2	ŏ	ŏ	79	August.	2	ŏ	ŏ	95
Sept	5	ī	5	73	Sept	2	Ō	Ó	79	Sept	2	0	Ō	95
October	4	10	0	65	October	2	0	0	79	October	2	0	0	95
Nov	4	1	7	59	Nov	2	0	0	79	Nov	2	3	0	103
Dec	3	17	9	56	Dec	2	0	0	79	[∥] Dec	3	0	0	143
	18	69.				1	870.				1	871.		
Avereg	e R	te e	n f	Rate	Averag	o TR	oto	of	Rate	Avered	Δ R	ata	of	Rate
Averag Y	ear.			of	Averag Y	ear		V.	of	Averag	ear		OI.	of
£ 3	4s. 2	2d.		Year =100.	£3	2s.	Ód.		Year = 100.	£ 2	17s.	'8d.		Year =100.
					II									
Jan	£ 3	8. 0	d. 0	93	Tom	£	8.	d.	97	T	£	8.	d.	87
Feb		Ö	0	93	Jan Feb	3	0	0	97	Jan Feb	2	10 10	0	87
March	3	ŏ	ŏ	93	March	3	ő	Ö	97	March	3	0	6	104
April		ŏ	ŏ	125	April	3	ő	ő	97	April	2	-	6	93
May	4	9	9	140	May	3	ŏ	ŏ	97	May	2	10	ŏ	87
June		ŏ	ŏ	125	June	3	ŏ	ŏ	97	June	2	6	7	80
July		ĕ	ŏ	103	July	3	9	2	111	July	ī	14	7	60
August.		17	5	89	August.	1 .	2	7	165	August		ō	Ò	69
Sept	2	10	0	78	Sept	3	1	6	99	Sept	2	6	7	81
October		10	0	78	October	2	10	0	81	October		9	0	189
Nov		17	9	90	Nov	2	10	0	81	Nov	4	9	3	154
Dec	3	0	0	93	"Dec	2	10	0	81	Dec	3	5	9	114

TABLE VI. Continued—Monthly Averages of Minimum Rate of Bank of England.

		OF J	RANI	K O	E	ENG	LAND.					
1872.				18	73.			1	18	74.		
Average Bate of	Rate	Av	erag	e R	ate	of	Rate	Averag	e Ra	te o	of	Rate
Average Rate of Year,	of Year	ij	Ÿ	ear	,		of Year	1	ear,			of Year
£4 2s. 0d.	=100.	-	£4 1.	58.	10d		=100.	£3 1	3e. 1	.0d.		= 100.
	-			_	—		i				_	
Jan 3 0 0	73	T	- 1	£ 4	8. 11	d.	96	T	£	8.	d.	106
Jan 3 0 0 Feb 3 0 0	73	Jan. Feb.		3	10	9	73	Jan Feb		18 10	9	95
March 3 0 0	73	Mar		3	18	ő	76	March		10	ŏ	95
April 3 14 0	90	Apr		4	0	ŏ	83	April	1 -		ŏ	95
May 4 15 3	116	May		5	5	3	110	May	4	Õ	5	109
June 3 10 0	85	June		6	. 3	7	129	June	2	16	5	76
July 3 5 3	79	July	٠	5	1	7	106	July		10	9	69
August. 3 10 0	85	Aug	ust.	3	7	11	71	August.		13	0	99
Sept 3 14 3	90	Sept		3	2	10	65	Sept		0	0	81
October 5 14 9	140	Octo		6	1	5	127	October		11	7	97
Nov 6 9 9	158	Nov		8	2	0	169	Nov	4	8	2	119
Dec 5 9 9	133	Dec.	• •••	4	17	7	102	Dec	6	0	0	163
1875.		l		18	76.			l	18	77.		
Average Rate of	Rate	Av	erage	R	ste	of	Rate	Averag	e Ra	te d	of	Rate
Y ear,	Year		Y	ear,			Year	1 1	ear,			Year
£3 4s. 8d.	=100.	•	£ 2 1	28.	ld.		=100.	#22	18s.	U d.		=100.
	-				s. d.						-	
Jan & s. d. 4 13 5	144	Ton	Jan 2 s.				183	Jan	2	в. О	d. 0	69
Feb 2 18 7	90	Feb.		4	0	8	154	Feb		ŏ	ő	69
March 3 10 0	108	Mar	ch		19	ŏ	152	March		ŏ	ŏ	69
April 3 10 0	108	Apri		2	14	6	104	April	2	ŏ	ŏ	69
May 3 10 0	108	May		2	0	Ó	77	May	2	19	0	102
June 3 10 0	108	June	э	2	0	0	77	June	3	0	0	<i>103</i>
July 3 2 11	97	July	٠	2	0	0	77	July	2	6	8	79
August. 2 4 7	69	Aug		2	0	0	77	August.	2	2	6	73
Sept 2 0 0	62	Sept		2	0	0	77	Sept	3	0	0	103
October 3 2 11 Nov 3 11 0	97	Octo		2 2	0	0	77	October		12 17	9	158 168
Nov 3 11 0 Dec 3 1 10	96	Nov.		2	ő	0	77	Nov Dec	4.	0	0	138
Dec 3 1 10) 30	1000	• • • • •					Dec		<u>~</u>	<u> </u>	136
18	878.				$\ _{-}$			1845-7	8.			
American Pode	of Vone		Rate	of	-	Α-		Pata of 94	V		I	Rate of
Average Rate £3 15s.		,	Yes			A		Rate of 34 3 17s. 9d.	1 em	rs,	3	4 Yrs
20 100.	· ·		=10	ю.			~	J 115. Cu.			-	= 100.
1	£ s.	d.			II -			اء ا	e s.	d.	$-\Gamma$	
January	3 6	6	8	88	J	anu	ary			6		<i>103</i>
February	2 0	0	l £	3			uary		15	0		96
March	2 3	6		57	N	Iar c	h			2		<i>96</i>
April	8 0	0	9			l			6		95	
May	3 0	6	30	N	lay	•••••			1	ı	104	
June	2 10			37			•••••			11	i	98
July	8 16									4		94
August	4 14 5 0	0	80 33			18t 2m bor			2 0		9 4 90	
September	5 13	-	15	-			ember ber			6		90 105
November	5 11	9	14				\mathbf{mber}			8		114
December	5 0	-	15				mber		4	5		108

TABLE VII.—BANK OF ENGLAND
TABLE OF THE CHANGES IN THE BATE OF DISCOUNT CHARGED BY THE
YEAR, SINCE 1ST SEPTEMBER, 1844 (when the Bank

			I EAI	, SINCE	IST SE	TEMBER	, 1844 (WHOH U	e Dank
Years.	Numb	er of Ch	anges.	2 %	21 %	2} %	3 %	31 %	4 %
	Rise.	Fall.	Total.	Days.	Days.	Days.	Days.	Days.	Days.
1844		1	1		•••	117	•••		•••
1845	2	•••	2	l	•••	289	21	55	•••
1846		1	1		•••		126	239	•••
1847	6	8	9		•••		14	7	177
1848		8	8		•••		59	140	40
1849		1	1		•••	39	326		•••
1850	1	•••	1		•••	360	5		•••
1851		•••			•••		365		•••
1852		2	2	253	•••	113	•••		•••
1853	6	•••	6	6	•••	14	133	91	14
1854	1	1	2			•••	•••		•••
1855	4	4	8		•••		•••	84	7
1856	2	5	7		•••	•••	•••		•••
1857	6	8	9		•••		•••	•••	•••
1858		6	6		•••	22	301	7	7
1859	2	8	5		•••	288	35	14	•••
1860	8	3	11	 	•••	19	12		226
1861	3	8	11		•••		54	49	21
1862	2	3	5	98	•••	147	120	•••	•••
1863	8	4	12		•••		31	12	241
1864	7	8	15		•••		•••		•••
1865	8	8	16		•••	•••	42	21	98
1866	5	9	14		•••		•••	11	42
1867		3	3	159	•••	56	112	38	•••
1868	2	•••	2	324	•••	14	28		•••
1869	3	4	7		•••	77	183	21	49
1870	4	6	10		•••	93	223	9	12
1871	4	6	10	70	28	124	66	14	23
1872	9	5	14		•••	•••	123	76	50
1873	11	13	24		•••	•••	、 35	76	61
1874	6	7	13	•••	•••	42	70	119	81
1875	5	7	12	56	•••	21	84	147	43
1876	1	4	5	255	•••		14	14	62
1877	4	3	7	170	•••	7	100		89
1878	6	4	10	5 6	•••	28	91	28	21
	126	138	264	1,447	28	1,870	2,773	1,272	1,314

MINIMUM RATE OF DISCOUNT, 1844-78.
BANK OF ENGLAND, AND THE NUMBER OF DAYS AT EACH RATE IN EACH Act came into Operation), TO DECEMBER 31st, 1878.

44 %	5 %	5} %	6 %	61 %	7 %	8 %	9 %	10 %	Total.	_
Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	Years.
									117	1844
•••								•••	365	1845
•••			•••						865	1846
•••	127	56	46	•••	10	28	•••	•••	365	1847
•••	27	•••	•••	•••		•••	•••		366	1848
•••		•••	•••			•••	•••	•••	365	1849
•••	•••		•••	•••		•••	•••	•••	365	1850
•••		•••	•••			•••	•••	•••	365	1851
•••		•••	•••			•••	•••	•••	366	1852
14	93		•••				•••	•••	365	1853
•••	281	84	•••			•••			365	1854
84	102	14	•••		74			•••	365	1855
98	35		20	14	199	•••			366	1856
•••		84	127	77	4	24	4	45	365	1857
•••	14		7			7	•••		365	1858
28		•••		•••		•••	•••	•••	365	1859
33	63		13			•••	•••	•••	366	1860
14	49	•••	91	•••	52	35	•••	•••	365	1861
•••									365	1862
•••	25		27	•••	8	21	•••		365	1863
•••			106		102	81	77		366	1864
52	39	14	49		50				365	1865
42	21		56	•••	37	59	1	96	365	1866
• • •						•••	•••	•••	365	1867
•••						•••		•••	3 66	1868
35			•••	•••		•••	•••	•••	365	1869
7	7	7	7			•••		•••	365	1870
•••	40	•••	•••			•••		•••	365	1871
7	47		44	•••	19	•••			366	1872
43	45	•••	57		22	13	13		365	1873
8	14		31			•••			365	1874
•••	7	•••	. 7			•••			365	1875
•••	21								366	1876
•••	49								365	1877
•••	104		37						365	1878
465	1,210	259	725	91	577	268	95	141	12,535	

CHAPTER IX.

VARIATIONS IN THE RATE CHARGED BY THE BANK OF FRANCE FROM 1844 TO 1878.

THE last chapter contained a table of the variations in the rate of discount charged by the Bank of England from the date when the Act of 1844 came into force to the present time. That date was selected as the starting point of the inquiry, because before that period it had scarcely been the custom of the Bank of England to make any variation at all in its rate. occasions, particularly in 1839, a higher rate was sometimes charged, but the regular Bank rate was 4 per cent. The market rate might be something very different, but the Bank did not concern itself with that. If the market rate was as high or higher than the Bank rate, the Bank was resorted to for discount purposes; but if the market rate was lower, the Bank did not reduce its rate accord-Earlier than the date from which that table starts—September 5th, 1844—the rate charged by the Bank of England is no guide to the market rate, and hence it was of no service to pursue the investigation further back than that time.

The same date has been taken in the table of the variations of the rate of the Bank of France, which accompanies this chapter, in order to facilitate comparison between the operations of the two banks.

The tables prepared for this purpose correspond exactly with those relating to the Bank of England. first Table, No. VIII., gives the average rate of discount charged month by month by the Bank of France during the period from 1845 to 1877; it also shows the proportion which the rate charged in each month bore to the average rate of the year. A summary Table, page 109, shows the average monthly rates for the seventeen years, 1845-61, 1862-1878, and for the whole period, 1845-78. Table No. IX. gives the number of changes of the rate in each year, and the total number of days at each rate in each year. A supplementary Table, No. XIII., page 110 shows the number of days at each rate, arranged from the lowest rate to the highest, and the number of days at each rate arranged from the greatest number of days which each rate lasted to the smallest.

Before commencing this comparison, it will be desirable to give some description of the organisation of the Bank of France. The direction of the bank consists of the following persons:—First, there is a governor and two sub-governors; all these three are nominated by the Government and are understood to be removable at its pleasure, but this power, as a matter of fact, is not exercised. Then there are fifteen directors, who are elected by the proprietors. Three of these directors must be selected from the class of the receiversgeneral, who are connected with the Government, and the management of the taxes of the country. receveurs-général, or trésoriers payeurs-général, as they are most properly called, are the Government or Treasury Agents in the Departments. Five of the twelve remaining directors must be taken from the merchants, manufacturers, and leading business men in Paris. sides these there are the three censors, who must be chosen from among the men engaged in business and manufactures, and who thus specially represent the

manufactures and the industry of Paris. The governor. the two sub-governors, and the fifteen directors, form the general council. Nothing is done without the presence and the surveillance of the censors, but they have not the right to vote, though they may speak and place their opinions on the minutes of the deliberations. Great part of the detail of the management rests with the two sub-governors, but the directors have the right to decide and vote on any measure which may come The directors are understood to be rather before them. checks on the two sub-governors than to be the actual managers of the business themselves. The system is understood to work well in practice, and the mixture of the more permanent portion of the governing body, which is selected by the Government, with the portion which is selected by the shareholders themselves, is an advantage in enabling a regular system of management to be steadily carried out from year to year. The Bank of France had at the date of its report in 1878, 86 branches situated in all the principal cities and towns of the Some of these branches carry on a very large business, and the amount of the business done by them in the aggregate considerably exceeds that done by the head office at Paris. Some of the branches, however, It was mentioned in the report for 1878 are small. that no fewer than 41 of them were carried on at a loss. Some of these branches had been but recently established; they give collectively very valuable assistance to the trade of the country; and it is certain that without them the position of the bank would be very inferior to that which it holds at the present time. The best description, perhaps, which can be given of the mode in which the business of the bank is carried on is to be found in the evidence given by M. Rouland, the late governor of the bank, before the "Enquête sur les principes et les faits généraux qui régissent la circulation monétaire et fiduciaire," held in Paris in 1865. M. Rouland, in describing the organisation of the governing body of the bank, stated that it consisted of two perfectly distinct elements, being, one, the portion

chosen by the State, and the other chosen by the share-The persons chosen by the State, namely, the governor and the two sub-governors, are, according to M. Rouland's words, bound to see that the business of the bank is carried on for the public advantage. their duty to see that the statutes of the bank are not overstepped, and that the interests of trade and commerce are attended to. It is from them that the proposals to raise or to lower the rate of interest appear almost invariably to proceed. M. Rouland's description was as follows:--"Nothing of any description which concerns the great interests of the public, nothing which concerns the larger duties which the bank has to perform towards commerce and industry, nothing of all that class of business belongs to, or is left to the discretion of what he called the interested party." By this M. Rouland understood that portion of the governing body which directly represented the shareholders.

"This is a guarantee," M. Rouland continued, "which ought, of itself, to satisfy any who have any doubts on the subject. Does the public know it? Are the public aware that during sixty-two years it has not perhaps happened twice that the council has had to propose that the rate of discount should be raised or lowered? Does the public know that it is always the active element of the Government, which, watching vigilantly over the public interest, has made the proposition?" M. Rouland proceeded to say that the two portions of the governing body have always worked together in the most perfect harmony, and that in this harmony of the two portions of the governing body the security of the institution M. Rouland spoke, and with a just sense of pride, of the part which the Bank of France had always taken in developing the commerce and industry of that country. Opinions have, however, been occasionally expressed that the commercial element is not sufficiently represented in the general council of management of the bank, and that it would be desirable to choose a greater number of representatives of various branches of business to form part of the direction.

This opinion is referred to here, but it is only right to add that the Bank of France has for many years appeared to carry on its business with great intelligence and judgment in many of the most essential points, and in particular its management during the period of suspension of specie payments in France, a period of the greatest difficulty, was a brilliant example of what the conduct of a bank should be under exceptionally trying circumstances.

The business of banking has not, it must be remembered, hitherto reached in France anything like the same proportions which it has done in Great Britain and Ireland. There are very few banks in France at all to be compared with the larger banks of England, Scotland, and Ireland. The "Comptoir d'Escompte," the "Credit Lyonnais," and the "Société Générale," and a few others, principally in the larger towns, obtain doubtless their share of the business—but no bank in France possesses anything like the organisation of the Bank of France, and its position is in this respect a very different

one from that of the Bank of England.

The amounts of the balances kept by other banks with the Bank of France have never been published in the same manner as those kept by the London bankers with the Bank of England, and hence it is not possible to speak on the subject with the same certainty; but it is not likely that they approach anything like the From both these reasons, and from the same sums. general circumstances of the trade of the country, the Bank of France is not exposed to anything like the same sudden demands as the Bank of England. current of commercial activity in France, flows with a very different and more equable course than in England. A country which depends so greatly on agriculture as France, where manufactures, commerce, and trade with other countries fill relatively so much smaller a space in the general activity of the people than in England, will always be likely to follow a more undisturbed course in the way of business than is, or can be, the case here. There are much fewer causes to lead to

the vast demands for bullion for export which occasionally operate so suddenly and so powerfully on our market. The sums on deposit with banks in France are, beyond question, both smaller in proportion to the numbers and to the general wealth of the population than in England, and they are also more generally deposited for longer periods than with us, and are much less likely to be suddenly required to be repaid. these circumstances unite in causing the demands on the Bank of France to be of a totally different description from the demands on the Bank of England, and it is only natural to find that this difference is reflected in the variations of the rate of interest charged by the two The average rate of discount charged by the Bank of France has been rather higher than that charged by the Bank of England for the period under consideration, but the duration of extremely high rates has been much shorter. Thus, the rate of the Bank of France has been oftener at 4 per cent. during the period under notice than at any other rate, and next to that rate 5 per cent. shows the highest proportion. firm which had done business with the Bank of England would have been able to have its bills discounted at 3 and 2½ per cent. for fully an equal length of time as it would have been charged 4 per cent. by the Bank of France. The rate ruled at 3 per cent. for 2,773 days with the Bank of England, while it only stood at that rate for 1,594 days with the Bank of France, and while the Bank of England has charged 2 per cent. for 1,447 days, the same rate was charged by the Bank of France for 559 days only. But in the highest rates of all, the customers of the Bank of France would have had the advantage. The Bank of France has never raised its rate to 10 per cent., but the Bank of England has charged that rate for 141 days. The Bank of France charged 9 per cent. for 16 days only, but the Bank of England did so for 95 days, and while the French rate has been 8 per cent. for 41 days only, the rate of the Bank of England was at that point for 268 days.

The number of variations in the rate has been much

smaller in France than in England. During the period under consideration the Bank of France altered its rate 86 times only; the Bank of England altered its rate 264 times. The greatest number of variations in the rate of the Bank of England took place in 1873, when there were no less than 24 changes; during that year the Bank of France altered its rate four times only. The greatest number of changes in the rate of the Bank of France took place in 1864 when there were 11 changes. but in that year there were 15 alterations at the Bank of England. In one respect there is a considerable similarity to be observed between what has occurred both in France and in England. In both countries during the earlier portion of the period under notice there were far fewer alterations than during the later portion. But there is one curious difference in the course of business in the two countries to be noted. While during quite recent years the number of alterations in the rate charged by the Bank of England has tended to increase, the changes in the rate of the Bank of France have diminished in number. We will take the period from 1870 onward:—

BANK OF ENGLAND.	1	Bank of France.	
	No. of		No. of
	anges in		anges in
Years.	Rate.	Years.	Rate.
1870	10	1870	. 4
1871	10	1871	
1872	. 14	1872	
1873		1873	
1874	13	1874	
1875		1875	
1876	5	1876	
1877		1877	
1878		1878	
Changes in rate	105	Changes in rate	. 16

It is also a thing worth notice that though the average rate charged by the Bank of France, taking the whole time from 1844 onwards into consideration, has been somewhat higher than the rate charged by the Bank of England, the rates charged by the Bank of France have been lower than those of the Bank of England during the years of panic which have occurred in England

during the same period. Thus, to compare the rates in England and France during the years 1847, 1857, and 1866:—

	BANK OF ENGLAND.	1	BANK OF FRANCE			
	Rate	1		B	late	
	of Discoun	ıt.	of	Di	SCOT	ınt.
Year.	£ 8. d	l. Year	•	£	8.	d.
1847	5 3 6	3 1847		4	19	0
1857	6 13 8	1857		6	3	Ō
1866	6 19	1866		3	14	Õ

It is a remarkable thing that there should have been so great a difference in the rate of discount charged at these dates in two great centres of business activity situated so close to each other and connected by so many bonds of commercial intercourse. In the year 1878 a similar divergence took place, the rate of the Bank of England was £3 15s. 8d., of the Bank of France only £2 4s. 2d. for that year. It appears, however, that there has been on the whole of late years a tendency towards a greater correspondence in the rate of interest charged in both countries, and it is quite probable, now that France has resumed specie payments, that Paris will be likely again to become a great market for exchange operations, and that we may again see a great number of alterations occur in the rate of interest charged by the Bank of France.

The Bank of France, we must however remember, has had to pass through very great trials during recent years. Changes in the form of Government, revolutions, wars, and even hostile occupation, have all disturbed the even course of business in Paris and in France. The Bank of France has had to bear many trials of this description, and has met them all with great courage and prudence on the part of its governing body.

TABLE VIII.—Monthly Averages of Bate of Bank of France—1844 to 1878.

					F RANCE	-10	344	TO	19/9.					
	18	45.			1846.					18	47.			
Average Ye	ear,		of	Rate of Year = 100.	Averag Y £4 (ear,	,	of	Rate of Year =100.	Averag	ear,		of	Rate of Year =100.
Jan Feb March April May June July August. Sept	2444444444	8. 0 0 0 0 0 0 0	d. 0 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 100 100 100	Jan Feb March April May June July August. Sept	2444444444	8. 0 0 0 0 0 0 0	d. 0 0 0 0 0 0 0 0 0	100 100 100 100 100 100 100 100	Jan Feb March April June July August. Sept		8. 12 0 0 0 0 0 0	d. 6 0 0 0 0 0 0 0 0	90 100 100 100 100 100 100 100
October	4	0	0	100	October	4	0	0	100	October	5	0	0	100
Nov Dec	4.	0	0	100 100	Nov	4	0	0	100 100	Nov Dec	5 5	9	9	100 109
Dec	_	48.	<u> </u>	100	1849.					1 1000	_	50.	-	103
Averag Y £4 (ear,		of	Rate of Year = 100.	Average-Rate of Year, £4 0s. 0d. Rate of Year = 100.					Averag Y £4	ear,		of	Rate of Year =100.
Jan Feb March April May June July August. Sept October Nov	244444444444444444444444444444444444444	8. 0 0 0 0 0 0 0 0 0 0 0 0 0	d. 0 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 100 100 100 100 100	Jan Feb March April June June Juty August. Sept October Nov Dec	<u> </u>	s. 0 0 0 0 0 0 0 0 0 0 0	d. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 100 100 100 100 100	Jan Feb March April May June July August. Sept October Nov Dec	_	8. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	d. 0 0 0 0 0 0 0 0 0 0 0	100 100 100 100 100 100 100 100 100 100
	18	351.				18	352.				18	353.		
Averag Y £4			of	Rate of Year = 100.	Averag Y £3	e R ear 3s.	ate , 7d.	of	Rate of Year =100.	Averag Y £3	e R ear, 4s.	ate 9d.	of	Rate of Year =100.
Jan Feb March April June July August. Sept October Nov Dec	444	8. 0 0 0 0 0 0 0 0	d. 0 0 0 0 0 0 0 0	100 100 100 100 100 100 100 100 100 100	Jan Feb. March April May June May June October Nov. Dec.	3 3 3 3 3 3 3 3 3	8. 0 0 3 0 0 0 0 0	d. 0 0 0 0 0 0 0 0 0	126 126 99 94 94 94 94 94 94 94 94	Jan Feb March April May June July August. Sept October Nov Dec	2333333333444	8. 0 0 0 0 0 0 0 0 0 17 0	d. 0 0 0 0 0 0 0 0 0	92 92 92 92 92 92 92 92 92 119 123 123

TABLE VIII. Continued—Monthly Averages of Rate of Bank of France.

		DANK		KAN	<u> </u>	·	1856.		
1854.		ate Arongo Poto of Rate							
Average Rate of	Rate	Average hate of Year, Of Year				Average	Rate	of	Rate
Year,	of			-		Y	ear,	-	of
£4 6s. 6d.	Year =100.	£4 8s.	11d.			£5 1	0s. 2d.		Year = 100.
	=100.								= 100.
£ s. d.	l		£ 8.	d.		l_ i	£ 8.	d.	
Jan 4 9 8	108		4 0	0	90	Jan	6 0	0	<i>109</i>
Feb 5 0 0	116		4 0	0	90	Feb	6 0	0	109
March 5 0 0	116		4 0	0	90	March	6 0	0	109
April 5 0 0	116		4 0	0	90	April	5 0	0	91
May 4 8 9	102		4 0 4 0	0	90	May	5 0	0	91 91
June 4 0 0			-	-	90	June	5 0 5 0	0	
July 4 0 0 August. 4 0 0	92		4 0	0	90	July August.	5 0 5 0	0	91 91
	92	0	4 0	Ö	90		5 1	9	92
Sept 4 0 0 October 4 0 0	92		5 7	3	121	Sept October	6 0	0	109
Nov 4 0 0	92		6 0	ő	155	Nov	6 0	0	109
Dec 4 0 0	92		6 0	ŏ	155	Dec	6 0	Õ	109
-				<u> </u>	100	1 200		_	100
1857.		1858.					1859.		
Average Rate of	Rate	Average Rate of Rate of				Average	e Rate	of	Rate
Year.	of Year	Year, Year				Y	ear,		of Year
£6 3s. 3d.	=100.	£3 14s. 0d. Year = 100.				£3 9	9s. 4d.		=100.
		=100.							
£ s. d.		£ s. d.				-	£ 8.	d.	
Jan 6 0 0	97	Jan 5 0 0 135				Jan	3 0	0	87
Feb 6 0 0	97		4 1	6	109	Feb	8 0	0	87
March 6 0 0	97	1	4 0	0	108 108	March	8 0	0	87
April 6 0 0	97 97		40	0	108	April	3 0 3 19	0 6.	87 114
May 6 0 0 June 5 16 9	95		3 12	8	97	May June	4 0	0.	114
June 5 16 9 July 5 10 0	89		B 10	0	95	July	4 0	Ö	115
August. 5 10 0	89	, J	3 10	ŏ	95	August.	3 12	6	104
Sept 5 10 0	89		3 6	9	90	Sept	3 10	ŏ	101
October 6 11 9	107		3 0	ŏ	81	October	3 10	ŏ	101
Nov 8 5 0	134		3 0	ŏ	81	Nov	3 10	ŏ	101
Dec 6 15 3	110	Dec 3	3 0	ŏ	81	Dec	3 10	ŏ	101
1860.			1861.			i i	1862.		
		ļ					1002.		
Average Rate of	Rate	Average	Rate o	of	Rate	Average	Rate	of	Rate
Ÿear,	of Year	Yes	ır,		of Year	Y .	ear,		of Year
£3 12s. 7d.	=100.	£5 11s	s. 1d.		=100.	£3 1	5s. 1d.		=100.
						l			
L 8. d.	oc		£ 8.	d.	102	T	£ 8.	d.	101
Jan 3 10 0	96 96		6 16	9	123	Jan	4 18	6	131
Feb 3 10 0	96		7 0	0	126	Feb	3 15	6	100
March 3 10 0 April 3 10 0	96	March 6 4 9 112				March	4 0 3 10	0	106 93
	96	April 5 0 0 90					3 10	0	93
May 3 10 0 June 3 10 0	96	May 5 0 0 90 June 5 0 0 90				May June	3 10	0	93
	96	T 1 T 1 A 1 A 1				July	3 10	0	93
July 3 10 0 August. 3 10 0	96					August.	3 10	Ö	93
Sept 3 10 0	96	August. 5 0 0 90 Sept 4 19 9 90				Sept	8 10	ŏ	93
October 3 10 0	96	· · · · · · ·	6 0	ő	108	October	3 10	ŏ	93
Nov 4 0 9	111		5 12	3	101	Nov	3 16	9	102
Dec 4 10 0	124		5 11	ĭ	100	Dec	4 0	ŏ	106
_ 55, 2 25 0							<u> </u>		

TABLE VIII. Continued—Monthly Averages of Bate of Bank of France.

		CE.							
1863.			1864.				1865.		
Average Rate of Year, £4 13s. 1d.	Rate of Year = 100.	Average Ye £6 10	ar,	of	Rate of Year = 100.		Rate o	of	Rate of Year =100.
Jan 4 12 0 Feb 5 0 0 March 4 14 0 April 4 0 0 May 3 13 6 June 3 15 3 July 4 0 0 Sept 4 0 0	99 108 101 86 79 81 86 86 86	Jan Feb March April May June July August. Sept	£ 8. 7 0 7 0 6 18 6 0 7 2 6 0 6 0 6 12	4000060000	107 107 106 92 109 92 92 92 101	Jan Feb March April May June July August. Sept	£ s. 4 10 3 16 3 14 3 10 3 10 3 0 3 0 3 0	d.063000000	122 103 100 94 94 81 81 81
October 4 16 8 Nov 6 6 0	103 135	Nov	7 14 6 16	6 0	118 104	October Nov	4 12 4 14	6 0	125 127
Dec 7 0 0	150	Dec	5 4	ŏ	79	Dec	4 0	ŏ	108
1866.			1867.						
Average Rate of Year, £3 13s. 6d.	Rate of Year =100.	Average Ye £2 14	Rate ear, 4s. 2d.	of	Rate of Year =100.	Average Y £2 1	Rate of Year =100.		
Jan 4 19 3 Feb 4 5 9 March 3 18 6 April 3 10 0 May 3 17 9 June 4 0 0 July 3 19 9	135 116 107 95 106 109	Jan Feb March April May June July	£ s. 3 0 3 0 3 0 3 0 2 10 2 10	d. 0 0 0 0 0 0 0	111 111 111 111 111 111 92 92	Jan Feb March April May June July	£ s. 2 10 2 10 2 10 2 10 2 10 2 10 2 10 2 10	d. 0 0 0 0 0 0	100 100 100 100 100 100 100
August. 3 11 0 Sept 3 0 0	96 82	August. Sept	2 10 2 10	0	92 92	August. Sept	2 10 2 10	0	100 100
October 3 0 0	82	October	2 10	ŏ	92	October	2 10	ŏ	100
Nov 3 0 0	82	Nov	2 10	0	92	Nov	2 10	Ò	100
Dec 3 0 0	82	Dec	2 10	0	92	Dec	2 10	0	100
1869.			1870.				1871.		
Average Rate of Year, £2 10s. 0d.	Rate of Year = 100.	Average Ye £3 19	Rate ear, 9s. 8d.	of ,	Rate of Year = 100.	Averag Y £5 1	e Rate ear, 4s. 3d.	of	Rate of Year =100.
Jan 2 10 0 Feb 2 10 0 March 2 10 0 April 2 10 0 May 2 10 0 June 2 10 0 July 2 10 0 August. 2 10 0 Sept 2 10 0 October 2 10 0 Doc 2 10 0	100 100 100 100 100 100 100 100 100 100	Jan Feb March April May June July August. Sept October Nov Dec	£ s. 2 10 2 10 2 10 2 10 2 10 3 3 5 16 6 0 6 0 6 0 6 0	d. 0 0 0 0 0 0 6 3 0 0 0	63 63 63 63 63 63 80 146 150 150	Jan Feb March April May June July August. Sept October Nov Dec	£ s. 6 0 6 0 6 0 6 0 5 15 0 5 0 5 16 6 0	d. 0 0 0 0 0 0 0 0 0 0 0 8 0	105 105 105 105 105 105 100 87 87 87 102 105

TABLE VIII. Continued—MONTHLY AVERAGES OF RATE OF BANK OF FRANCE.

												11					
	18	372				1		18	373.			1874.					
Averag Y £5	ear	,	of	Y	ate of ear 100.	A	verag Y £5 2	ear	,	of	Rate of Year = 100.	Avera	ge E Year 6s.	ate , 2d.	of	Rate of Year =100.	
Jan Feb March April June July July Sept October Nov Dec	2655555555555	8. 0 13 0 0 0 0 0 0 0 0 0 0	d. 0 0 0 0 0 0 0 0 0 0 0	1.	17 10 97 97 97 97 97 97	Feld Man Apr May Jun July Aug Sep Octo	rch ril y gust. t ober	£ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8. 0 0 0 0 0 0 0 0 0 13 0	d. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	97 97 97 97 97 97 97 97 97 110 117 97	Jan Feb March April May June July August Sept October Nov Dec	. 4 4 4 4 4 4 4 4 4	0 0 13 10	d. 0 0 0 0 0 0 0 0 0	116 116 109 105 105 93 93 93 93 93 93	
	18	75.						18	376.			1877.					
Average Y	ear,		of	Y	ate f ear .00.	A	Average Rate of Year, £23 8s. 2d. Rate of Year Year, £25 5s. 3d.			Year.				Rate of Year = 100.			
Jan Feb March April May June July August. Sept October Nov	24444444444444	s. 0 0 0 0 0 0 0 0 0 0 0 0 0	d. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10 10 10 10 10	00	Feb Mar Apr May Jun July Aug Sep	ust. t ber	£4443333333333333333333333333333333333	s. 0 0 0 0 18 0 0 0 0 0	d. 0 0 0 0 0 0 0 0 0 0 0 0 0 0	118 118 118 118 115 88 88 88 88 88 88 88	Jan Feb March April June July August Sept October Nov Dec	3 2 2 2 2 2 2 2 2	s. 0 0 0 2 0 0 0 0 0 0 0	d. 0 0 0 0 0 0 0 0 0 0 0 0 0 0	133 133 133 94 88 88 88 88 88 88 88 88	
			18	78.					I			1845-	78.				
Ave				of Y	ear,		Rate Yes = 1	ır		Av	rerage I	Rate of 34 4 1s. 5d.		ers,	1	Rate of 4 Yrs. = 100.	
January February March April May June July July Septembe October Novembe December	····			£2222222233	8. 0 0 0 0 0 0 0 0 0	d. 0 0 0 0 0 0 0 0 0	9 9 9 9 9	6	Fe M A Ju Ju Au Se Oct No	arcleril ay une ly epte tob	stmber		4	5 10 1 5 2 7 3 11 9 8 7 2 7 3 7 11 7 11		105 103 101 97 97 94 94 95 102 106 104	

TABLE IX.—BANK OF FRANCE
TABLE OF THE CHANGES IN THE RATE OF DISCOUNT CHARGED BY THE
YEAR, SINCE THE 1ST SEPTEMBER, 1844 (the Year the Bank Act

	Number of Changes.			2 %	1	3 %	or or		
Years.	 				21 %		31 %	4 %	
	Rise.	Fall.	Total.	Days.	Days.	Days.	Days.	Days.	
1844					•••			117	
1845				•••	•••			365	
1846	 				•••			365	
1847	1	1	2				•••	18	
1848					•••			366	
1849					•••			365	
1850					•••			365	
1851		•••						365	
1852		1	1		•••	803		63	
1853	1		1			279		86	
1854	1	1	2				•••	253	
1855	2		2				•••	277	
1856	1	1	2				•••	•••	
1857	4	4	8				•••		
1858		4	4			99	105	112	
1859	1	1	2			123	149	93	
1860	1		1				317		
1861	4	8	7						
1862	1	8	4				224	104	
1863	5	3	8				85	176	
1864	4	7	11						
1865	2	4	6		•••	126	84	70	
1866	2	5	7			123	85	108	
1867		2	2		214	151			
1868					866				
1869					365				
1870	4		4		199		8	9	
1871	1	1	2						
1872		1	1						
1873	2	2	4						
1874		2	2					210	
1875								365	
1876		1	1			219		147	
1877		1	1	270		95	•••		
1878	1		1	289		76			
	38	48	86	559	1,144	1,594	1,002	4,399	

BATE OF DISCOUNT, 1844-78.

BANK OF FRANCE, AND THE NUMBER OF DAYS AT EACH RATE IN EACH came into Operation in England), TO DECEMBER 31st, 1878.

44 %	5 %	5} %	6 %	6} %	7 %	71 %	8 %	9 %	Total.	Years.
Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	
•••									117	1844
							•••		365	1845
							•••		365	1846
•••	347			•••			•••	•••	365	1847
		•••		•••					366	1848
•••									365	1849
						•••			365	1850
•••									865	1851
							•••	•••	366	1852
				•••			•••		365	1853
	112			•••			•••		365	1854
•••	14	•••	74		•••		•••		365	1855
•••	178		188				•••		366	1856
	2	109	188	8	12	21	9	16	365	1857
12	87						•••		365	1858
		•••				•••			365	1859
49	•••			•••		•••	•••	•••	366	1860
2	229	11	58		65	•••			365	1861
16	21			•••	•••	•••	•••		365	1862
14	85		6	•••	49	•••			365	1863
9	14		163		148	•••	32		366	1864
40	45			•••			•••		365	1865
7	42				•••	•••	•••		365	1866
•••					•••		•••		365	1867
•••					•••	•••	•••		366	1868
•••					•••	•••	•••		365	1869
•••	10		144				•••		365	1870
•••	106		259						365	1871
•••	308		58						366	1872
•••	321		32		12				365	1873
91	64								365	1874
•••									365	1875
•••									366	1876
•••									365	1877
•••									365	1878
240	1,935	120	1,170	8	286	21	41	16	12,535	

CHAPTER X.

VARIATIONS IN THE RATE CHARGED BY THE BANK OF GERMANY, 1844 TO 1878.

THE two last chapters contained some account of the variations in the rate of interest charged by the Bank of England from 1844 to 1878, and by the Bank of France during the same period. It is desirable to complete this part of the investigation by a similar inquiry into the rates charged during the same time by the Bank of Germany. Strictly speaking, we ought to speak of the rates charged by the Bank of Prussia and by the Bank of Germany, for it was not till 1875 that the former institution merged into the latter one. As, however, it is the Bank of Germany which is now carrying on the business, we have placed the name of that bank at the head of this chapter. The same date and the same method exactly have been followed in constructing the tables which accompany this chapter as in those which were drawn up in the description of the variations charged by the Bank of England and the Bank of France, in order that the comparison made may follow precisely the same plan in all three cases, and enable the reader to see how far and to what extent the same causes have operated in all three countries.

The first Table, No. X., gives the average rate of discount charged, month by month, by the Bank of Germany during the period from 1845 to 1878; it also shows the proportion which the rate charged in each month bore to the average rate of the year. A summary table at page 109 shows the average monthly rates for the seventeen years, 1845-61, 1862-78; and for the whole period, 1845-78. Table No. XI. gives the number of changes of the rate in each year, and the total number of days at each rate in each year. A supplementary Table, No. XIII., shows the number of days at each rate, arranged from the lowest rate to the highest, and the number of days in each rate, arranged from the greatest number of days which each rate lasted to the smallest.

The Imperial Bank of Germany is, like the Bank of France, under the control of the State; it carries on a very considerable business in Berlin, and has also branches which form a network covering the whole of Germany. Including Berlin, there are 211 offices of the "Reichs-Bank." In this latter respect the business which the Bank of Germany carries on corresponds more closely with that of the Bank of France than with that of the Bank of England, and it is a curious though an entirely accidental coincidence that the number of variations in the rate of discount was exactly the same in the case of the Bank of France as in that of the Bank of Germany from 1844, and the close of the year 1877; there were eighty-five alterations in the rate recorded at each of these banks during those years, while the Bank of England altered its rate two hundred and fifty-four times during the same time; that is to say, nearly three times as often as either of the two other banks under consideration.

The year 1872 marks the date of the introduction of a gold standard into Germany. It could hardly have been expected that so colossal an operation, probably the largest of its kind which modern business has ever witnessed, could have ever been carried into effect without great disturbances of the money market in the countries employing a gold currency. This doubtless accounts for much of the unsteadiness of our money market during the years 1872—1875, and for many of the alterations in the rate of discount charged at Berlin

during the same period.

The business of banking is probably, on the whole, more developed in Germany than in France. There are many considerable banks in Hamburg, Frankfort, Bremen, and in many of the cities of North Germany, besides many carrying on business in Berlin. Hence the Bank of Germany finds more competition to deal with than the Bank of France.

The business carried on by the Bank of Germany appears to correspond more with that carried on by the Bank of France than with that of the Bank of Eng-Both the Banks of France and Germany have many branches, many more than the Bank of England; both of them have a large business in remitting sums of money from one part of their respective countries to another, and the bills which both of them receive in the way of their business are comparatively small in The average amount of the inland bills dealt in by the Bank of Germany in 1877 was £69—for each bill. The average amount of the trade bills discounted at Paris by the Bank of France in 1877 was £32 7s. 6d. The average amount of the bills dealt in by the Bank of England is believed to be much larger than either of these sums.

The business of the Imperial Bank of Germany on current accounts (Giro Verkehr) has considerably increased during recent years. This business has attained an importance which could scarcely have been foreseen, and will, undoubtedly, increase still more if the custom of making payments by cheques, which now in Germany is only usual in Hamburg, becomes general throughout the country. The balances derived from this source averaged about £3,500,000 in 1876, £4,900,000 in 1877, and £5,500,000, in 1878. The Bank of Germany held on an average £25,000,000 in bullion in 1876, £26,000,000 in 1877, and £24,000,000 in 1878. The

"cover" held against the notes in circulation, consisting of bullion and notes of the Imperial Treasury, as required by paragraph 17 of the Bank Law, was about 81 per cent. of the liabilities under that head in 1877. This seems a high proportion with a rate of discount of about 4½ per cent. The proportion was 79 per cent. Besides the note circulation, the other liabilities must be borne in mind, and the proportion of bullion held against the total of these, and the note circulation together, amounted to something like 60 per cent. in 1877, and 61 per cent. in 1878. is a very considerable reserve, and it may assist us in estimating its relative importance to remember that the corresponding figures in the case of the Bank of England were 45 per cent. in 1877, and 42 per cent. in 1878. The Imperial Bank of Germany has to pay interest on a considerable part of the deposits it holds, and to divide a large portion of the profit it makes with the State. It was, however, able to pay its shareholders a return of 6^{29}_{100} per cent. on their capital in 1877, and 6^3_{10} per cent. in 1878. A further comparison between the details of the operations of the Banks of England, Germany, and France is not required in this place. A sufficient outline is given for the purpose proposed—the comparison of the rate of discount ruling in the three countries under consideration, as shown in the returns of the principal banks in the same.

TABLE X.—MONTHLY AVERAGES OF RATE OF BANK OF GERMANY—1844 TO 1878.

							102		0 1010	•									
	1	845	i			1	846				1	847							
Averag	e R	ate	of	Rate	Averag	e R	ate	of	Rate	Averag	e R	ate	of	Rate					
Y	7ear	٠,		of Year	£4.	ear	,		of Year	£4 1	ear	,		of Year					
24	78.	0 d .		=100.	£4 :	13s.	7d.		=100.	£4 1	6s.	10d	•	=100					
			_	 	¦			-	 	I				·					
Jan	£	8. 10	d. 0	104	Jan	£ 5	8. O	d. 0	107	Jan	£	g. O	d. 0	103					
Feb	4	10	Ö	104	Feb	5	ő	ő	107	Feb	5	ő	ŏ	103					
March		7	9	101	March		2	9	88	March	5	ŏ	ŏ	103					
April	4	ò	ŏ	92	April		ō	ŏ	85	Arril	5	ŏ	ŏ	103					
Мау	4	0	0	92	May	4	0	0	85	Мау	5	0	0	103					
June	4	0	0	92	June	4	0	0	85	June	б	0	0	103					
July	4	0	0	92	July	5	0	0	107	July	5	0	0	103					
August.	4	0	0	92	August.	5	0	0	107	August.	5	0	0	103					
Sept	4	0	0	92	Sept	5	0	0	107	Sept		10	0	93					
October	4 5	16 0	6 0	111 115	Nov	5	0	0	107	Nov	4	10 10	0	93 93					
Nov Dec	5	ŏ	Ö	115	Dec	5	0	0	107	Dec	_	10	0	93					
<u> </u>	_	_		110	1	_	<u> </u>	-	1 107	Dec									
	18	348		-		18	349.			1850.				Rate					
Average	e Ra	ate	of	Rate	Average	verage Rate of Rate of Average Rate of					Average Rate of					erage Bate of			
Y	ear,	,		Year		Year, Year Year						Year, £4 0s. 0d.							
£4 1	.38.	Зa.		=100.	24 0	8. 1	.va.		=100.	24 Vs. Va.				Year =100.					
	æ	_	d.			£		d.		£ 8, d.									
Jan		8. 10	a. 0	97	Jan	4	8. 10	a. 0	111	Jan	4	8. O	a. 0	100					
Feb		10	ŏ	97	Feb	4	Õ	ŏ	99	Feb	4	ŏ	ŏ	100					
March		13	ŏ	100	March	4	ŏ	ŏ	99	March	4	ŏ	ŏ	100					
April	5	0	Ô	107	April	4	0	0	99	April	4	Ō	Ō	100					
May	5	0	0	107	May	4	0	0	99	May	4	0	0	100					
June	5	0	0	107	June	4	0	0	99	June	4	0	0	100					
July		16	6	103	July	4	0	0	99	July	4	0	0	100					
August.		10	0	97	August.	4	0	0	99	August.	4	0	0	100					
Sept		10	0	97 97	Sept	4	0	0	99 99	Sept	4	0	0	100					
October Nov	44	10	0	97	Nov	4	ö	Ö	99	Nov	4	0	0	100 100					
Dec	4		ŏ	97	Dec	4	ő	0	99	Dec	4	ŏ	0	100					
200:		=	<u> </u>	-	1 200		<u> </u>	<u> </u>		1 200	_	_	<u> </u>	100					
	18	351.		- I		18	352.				18	53.		-					
Average			of	Rate of	Average			of	Rate of	Average	Re	ite d	of	Rate of					
Y	ear,			Year	Y	ear,			Year	Y	ær,			Year					
£4 (JB. (Ja.		=100.	£4 (/8. V	Ja.		=100.	£4 5	8. (æ.		=100.					
	£	_	d.			£		d.			£	_	d.						
Jan	4	0. 8.	u. 0	100	Jan	4	8. O	0	100	Jan	4	8. 0	0	100					
Feb	4	ŏ	ŏ	100	Feb	4	ŏ	ŏ	100	Feb	4	ŏ	ŏ	100					
March	4	0	0	100	March	4	Ŏ	Ō	100	March	4	Ŏ	0	100					
April	4	0	0	100	April	4	0	0	100	April	4	0	0	100					
Мау	4	0	0	100	Мау	4	0	0	100	May	4	0	0	100					
June	4	0	0	100	June	4	0	0	100	June	4	0	0	100					
July	4	0	0	100	July	4	0	0	100	July	4	0	0	100					
August.	4	0	0	100	August.	4	0	0	100	August.	4	0	0	100					
Sept October	4	0	0	100 100	Sept	4	0	0	100 100	Sept October	4 5	0	0	100 100					
Nov	4	ŏ	0	100	Nov	4	0	ŏ	100	Nov	5	Ö	ŏ	100					
Dec	4	ŏ	ŏ	100	Dec	4	ŏ	ŏ	100	Dec	5	ŭ	0	100					

TABLE X. Continued-Monthly Averages of Rate of Bank of Germany.

	1	854			[855			li .	1	856		
Avera	ge E	late	of	Rate	Avera	ge F	Late	of	Bate	Avera	ze B	ate	of	Rate
•	Year	r,	-	of Year	1	Year	r,	-	of Year	1 :	(ear	٠,		of Year
£4.	7s.	5d.		=100.	£4	18.	5d.		=100.	£4 :	l8s.	10d	•	=100.
	1 £	s.	d.			1 £	8.	d.	-		ı £	8.	d.	
J an	. 5	0	0	114	Jan	. 4	0	0	9 8	Jan	4	19	6	101
Feb	. 5	0	0	114	Feb		0	0	98	Feb	5	0	0	101
March .	. 5	0	0	114	March .	. 4	0	0	98	March .	5	0	0	101
April	. 5	0	0	114	April	. 4	0	0	98	April	5	0	0	101
Мау		8	9	101	May		0	0	98	Мау		4	9	86
June		0	0	91	June		0	0	98	June		0	0	81
July		0	0	91	July	4.	0	0	98	July	4	0	0	81
August		0	0	91	August.		0	0	98	August		0	0	81
Sept		0	0	91	Sept		0	0	98	Sept		1	9	102
October		0	0	91	October	1 -	0	0	9 8	October		0	0	121
Nov		0	0	91	Nov		6	9	106	Nov	6	0	0	121
Dec	. 4	0	0	91	Dec	4	10	0	110	Dec	6	0	0	121
	1	857			11	1	858.			1859.				
Averag	ze R	ate	of	Rate	Averag	ze R	ata	of	Rate	Average Rate of				Rate
	l ear	٠.		of Year	3	7ear	٠,		of Year	Year,				of Year
£5	15s.	7d.		= 100.	£4.	2s.	7d.		=100.	£4 4s. 3d.				=100.
				-100.					100.	l	-100.			
_	1 £		d.		_	æ		d.		II _	£	8.	d.	
Jan		0	0	104	Jan		14	0	138	Jan		0	0	95
Feb		0	0	104	Feb		14	9	90	Feb	4	0	0	95
March		7	9	93	March		0	0	97	March		0	0	95
April	1	0	0	86	April		0	0	97	April		0	0	95
May		0	0	86	Ма у		0	0	97	May	4	18	6	117
June		0	0	86	June		0	0	97	June	5	0	0	119
July	5	0	0	86	July	4	0	0	97	July	4	12	0	10 9
August.		6	3	92	August.		0	0	97	August.		0	0	95
Sept	5	12	0	97	Sept	4	0	0	97	Sept	4	0	0	95
October		11	6	114	October	4	0	0	97	October	4	0	0	95
Nov	7	3	3	124	Nov	4	0	0	97	Nov	4	0	0	95
Dec	7	6	3	127	Dec	4	2	9	100	Dec	4	0	0	95
	18	36Q.				18	361.				18	862.		
Averag	re R	ate	of	Rate	Averag	e R	a.te	of	Rate	Averag	e R	ate (of	Rate
Ÿ	ear	,		of Year	Ÿ	ear	,		of Year	Ÿ	ear,			of Year
£4				=100.	£4				=100.	£4				=100.
1	£	8.	d.			£	8.	d.			£.	· 8.	d.	
Jan	4	Ö	0	100	Jan	4	õ	ō	100	Jan	4	ö	ō	100
Feb	4	0	0	100	Feb	4	0	0	100	Feb	4	0	0	100
March	4	0	0	100	March	4	0	0	100	March	4	0	0	100
April	4	0	0	100	April	4	0	0	100	April	4	0	0	100
Мау	4	0	0	100	Мау	4	0	0	100	Мау	4	Ō	0	100
June	4	Ō	0	100	June	4	Ō	o	100	June	4	0	0	100
July	4	0	0	100	July	4	Ō	0	100	July	4	Ō	0	100
August.	4	0	0	100	August.	4	Ō	0	100	August.	4	0	0	100
Sept	4	0	0	100	Sept	4	0	0	100	Sept	4	0	0	100
October	4	Ō	0	100	October	4	0	0	100	October	4	Ō	0	100
Nov	4	Ŏ	0	100	Nov	4	Ō	0	100	Nov	4	Ô	0	100
Dec	4	Ŏ	0	100	Dec	4	Ō	0	100	Dec	4	Ō	0	100
								'				_		

TABLE X. Continued-Monthly Averages of Rate of Bank of

GERMANY.														
	186	3.		ŀ		18	864.				18	65.		
Average	Rat	e of	0	ate of	Averag Y	e R	ate (of	Rate	Averag Y	e Ra	ste (of	Rate
£4 1	s. 6d	•		ear 100.	L 5	6s.	5d.		Year =100.	£4 1	8s. 1	1d.		Year =100.
T	£ s			98	T	æ	8.	d.	05	T	£	8,	d.	112
Jan F eb	4 (, ,	98	Jan Feb	_	10 10	0	85 85	Jan Feb	5 4	11 5	0	86
March	4 (98	March		10	ŏ	8 5	March	4.	0	0	81
April	4 (_		98	April	_	10	ŏ	85	April	4	ŏ	ŏ	81
May	4 (98	Мау	5	ŏ	9	95	May	4	ŏ	ŏ	81
June		Ó		98	June	5	ŏ	ŏ	94	June	4	ŏ	ŏ	81
July		0		98	July	5	0	0	94	July	4	Õ	Ō	81
August.	4 (0) :	98	August.	5	0	0	94	August.	4	0	0	81
Sept		0		98	Sept		13	0	106	Sept		16	6	97
October		0		98	October	6	18	3	130	October		14	0	135
Nov		7 9		08	Nov	7	0	0	132	Nov	7	0	0	141
Dec	4 10) (10	00	Dec	6	5	6	118	Dec	7	0	0	141
	186	6.				18	367.				18	68.		
A	. Dad		R	ate	Averag	D		a.e	Rate	A	D			Rate
Average	ear,	9 OI		of		ear		DI.	_of	Averag	ear.		or	of
£6 4	ks. 5d	L.		ear 100.	£4.	0s.	, 0d.		Year = 100.		08.			Year
			_ =	100.					-100.					=100.
1	£	. d	.			Æ	s.	d.			æ	8.	d.	
Jan	7	0 (1	12	Jan	4	0	0	100	Jan	4	0	0	100
Feb	-	4 9		00	Feb	4	0	0	100	Feb		0	0	100
March		0 (96	March	4	0	0	100	March		0	0	100
April		0 (96	April	4	0	0	100	April		0	0	100
Мау		6 8		33	Мау	4	0	0	100	May		0	0	100
June		0 (45	June	4	0	0	100	June	1 .	0	0	100
July	7 1			28 85	July	4	0	0	100 100	July		0	0	100
August.		-		80 80	August.	4	Ö	0	100	August		0	0	100
Sept October				81	Sept October		0	0	100	Sept October		0	0	100
Nov	-			72	Nov	1 -	0	Ö	100	Nov.		ŏ	ŏ	100
Dec				69	Dec		ŏ	ŏ	100	Dec	1	ŏ	ŏ	100
		_		-	11	==			1 100	11 200		<u> </u>		100
	186	9.			ll		870. 			Ì	18	371.		
Averag	e Ra	te of		Late	Avera	ge I	Rate	of	Rate	Avera	ze R	ate	of	Rate
Ÿ	ear, ls. 11		- 1	of Tear	1	Yea:	r, 7d.		of Year	1	ear 2s.	,		of Year
£4 4	ks. 11	d.		100.	£4.	178.	7d.		=100.	£4.	2s.	9d.		=100.
			<u>-</u> -		 				 	I		_		├─
Jan	£		l. 0	94	Jan	5		d. 0	102	Jan	£	s. 0	d. 0	121
Feb			ŏ	94	Feb			ĕ	84	Feb		9	3	108
March			ŏΙ	94	March .		_	ŏ	82	March .		3	6	101
April	4		ŏ	94	April			ŏ	82	April		ŏ	ŏ	97
May	4		ŏ	94	May			ŏ	82	May		ŏ	ŏ	97
June	4		ŏ	94	June			Õ	82	June		Ŏ	Ŏ	97
July	4		0	94	July	. 5		6	122	July	. 4	0	0	97
August.	4		0	94	August		7	3	151	August		0	0	97
Sept	4		0	94	Sept		1	9	104	Sept		0	Ú	97
October				117	October		0	0	102	October	1 .	0	0	97
Nov	5			118	Nov	1 -	0	0	102	Nov	1 -	0	0	97
Dec	5	0	0 1	118	Dec	. 5	0	0	102	Dec	4	0	0	97

TABLE X. Continued—Monthly Averages of Rate of Bank of Germany.

			G	ER	MAR	TY.									
1872.				18	73.				18	74.					
Average Rate of Year, £4 5s. 8d.	Rate of Year = 100,	ŀ	verag Y £4 1	ear,	,	of	Rate of Year = 100.	Averag	e Re ear, 7s. 8		of	Rate of Year =100.			
Jan	93 93 93 93 93 93 93 93 93 93 103 117 117	Feb Mar Apr May Jun July Aug Sep Octo	e y yust. t ober	4 3 4 5 6 6 4 4	s. 18 16 0 0 0 0 14 10 13 0	d. 3 0 0 0 3 0 3 3 0 0 0 0	99 77 81 101 121 121 121 95 91 94 101	Jan Feb March April June July August. Sept October Nov	d. 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	102 91 91 91 91 91 91 91 114 117 137					
1875.	1117		• • • • •	==	376.		101	Dec 6 0 0 .				107			
Average Rate of Year, £4 13s. 7d.	Rate of Year = 100.	A	verag Y £4	e R	ate		Rate of Year = 100.	Average Rate of Year,				Average Rate of			Rate of Year =100.
Jan 5 5 5 5 5 Feb 4 0 0 0 April 4 0 0 0 June 4 0 0 0 July 4 13 3 August. 5 0 0 0 Cotober 6 0 0 0 Nov 5 1 0 Dec 5 0 0	113 85 85 85 85 85 100 107 110 128 108	Feb Man Apr May Jun July Aug Sep	e y gust. t ober	5 3 4 4 3 3 3 4 4 4 4 4	s. 12 18 0 0 17 10 17 0 0 3 10	d. 3 9 0 0 3 0 9 0 0 6 0 0	135 95 96 96 93 84 93 96 96 100 108	Jan Feb March April May June July August. Sept October Nov	4 4 4 4 5 5	s. 3 0 0 0 14 9 0 0 10 11 2 12	d. 0 0 0 0 0 6 3 0 0 6 0 6 6	94 90 90 106 101 90 102 126 116			
1	878.				1			1845-7	8.						
Average Rate £4 6s.		,	Rate Yea =10	ır		A		Rate of 34 4 8s. 10d.	Yea	rs,	5	Rate of 34 Yrs. = 100.			
January February March April May June July August September October November December	£ s. 8 4 0 4 0 4 0 4 0 4 3 5 0 0 5 15	d. 6 0 0 0 0 0 0 0 0 0 0	9999	12 12 12 12 12 12 12 16 15	F M A M Ju Ju A Se O N	are pril ay ine ily ugu epte ctol	uary h st ember	£ s. d. 4 12 4 4 6 6 4 14 10 4 14 11 4 7 5 4 7 0 4 8 2 4 6 7 4 7 6 4 14 5				104 97 107 107 98 98 99 97 98 106 107			

TABLE XI.—Table of the Changes in the Bate of Discount Charged by the Bank of Germany, and the Number of Days at Each Rate in Each Year, since the 1st September, 1844 (the Year the Bank Act came into Operation in England), to December 31st, 1878.

rs.	No.	of Cha	anges.	31 %	4 %	41 %	5 %	51 %	6 %	61 %	7 %	71 %	8 %	9 %	Total
Years.	Rise.	Fall.	Total	Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days	. Days
1844	1		1		41	76									117
1845	1	1	2		204	78	83								365
1846	1	1	2		121		244		***						365
1847		1	1			122	243		***						365
1848	1	1	2			256	110						***		366
1849		1	1		314	51									365
1850					365										365
1851					365			/	1						365
1852					366			.(.							366
1853	1		1		273		92								365
1854		1	1		234		131)						***	365
1855	1		1		310	55		1							365
1856	3	1	4		121	7	138		100						366
1857	4	2	6				162	32	82	45		44			365
1858	1	4	5		330		19	11		5					365
1859	1	1	2		293		72								365
1860					366										366
1861					365										365
1862					365										365
1863	1		1		307	58									365
1864	3	1	4			124	128		54		60				366
1865	3	2	5		198		64		21		82				365
1866	1	7	8		18	45	87		79		68		5	63	365
1867					365										365
1868					366										366
1869	1		1		277		88								365
1870	2	3	5		150		163		20				32		365
1871		2	2		300	14	51								365
1872	1		1		260		106								366
1873	3	4	7		53	98	128		86						365
1874	2	2	4		257	14	56		38						365
1875	2	3	5		168		131		66						365
876	3	3	6	54	210	67	19		16						366
877	3	4	7		214	33	78	40							365
878	1	2	3		220	41	104								365
-	41	47	88	54 7	7,796	1 130	2,497	83	562	50 2	210	44	37	63	12,535

CHAPTER XI.

SOME REMARKS ON THE RATE OF DISCOUNT OF THE BANKS OF ENGLAND, FRANCE, AND GERMANY.

A REVIEW of some of the more important points of similarity and contrast in the operations and the rate of discount of the three banks of England, France, and Germany, will not be out of place here.

In one respect there is a difference between the rate charged at the Bank of Germany and those charged at the other two banks between the years 1844 and 1878, and that is in the minimum rate of discount charged. Both the Bank of England and the Bank of France occasionally lowered their rates below 3 per cent. in the course of those years. During the period under review the rate charged by the Bank of England was as the rates named below:—

2		k of England, 1844 to 1878.	Days. 1.447
2‡ 2‡	,,		28
			3,345

That is to say, for more than one-fourth of the whole time at these low rates. Though the average rate charged by the Bank of France was not quite so low as that charged by the Bank of England, it has sometimes charged less than 3 per cent. for a considerable period. The rates in the time under our notice were as follows:—

		NK OF FRANCE, 1844 TO 1878.	Days.
2	per cent. for		559
$2\frac{1}{3}$	- "		1,144
			1,703

Thus, in France, extremely low rates only prevailed for less than half the time that they did in England, but still in France the time which rates of 2 and 2½ per cent. lasted was nearly one-eighth of the whole, a far from unimportant fraction. While, however, extremely low rates have thus prevailed for a considerable time in England, and for a long period, though not equally long, in France, the rate at Berlin never once dropped so low as 3 per cent., and was at $3\frac{1}{9}$ per cent. for 54 days only during the years under our immediate notice. The rate was, however, fixed at 3 per cent. on March 21st, 1879, a point which had never been previously quoted. one respect there is a similarity observable between the rate charged at Paris and at Berlin. In both cases the greatest number of days is recorded when the rate stood at 4 per cent., and in both cases also the next largest number to 4 per cent. was 5 per cent.

The particulars are as follows:—

DANK OF THENCE, 1044 10 10/0.	Days.
4 per cent. for	
,	1,000
	6,334
BANK OF GERMANY, 1844 TO 1878.	Days.
4 per cent. for	7,796
5 ,	
	10,293
The corresponding figures in England w	ere :—
BANK OF ENGLAND, 1844 TO 1878.	Days.
4 per cent. for	
₩ PCI CCH0. IOI	1,314
5 ,,	

BANK OF FRANCE, 1844 TO 1878.

Dava.

It hence appears that these comparatively high rates were charged for the longest time in Germany; the next longest in France; and for the shortest time in England. But if the rate never fell below 3½ per cent. in Berlin between 1844 and 1878, it never rose above 9 per cent., and, indeed, stood at that high point for 63 days only during the period under consideration, that is to say for a very inconsiderable fraction of the whole time. The average of the rate, however, charged in Berlin was higher than at London or at Paris. the rate charged at Berlin was, though slightly, yet on the whole, the highest of the three banks; for if there were but comparatively few days at which extremely high rates of interest were charged, the length of time during which 5 per cent. and 4 per cent. lasted at Berlin has caused the average rate to be comparatively high. For the remaining variations in the rate we must refer our readers to the summary table at the end of this chapter, in which all the variations of the rate at each of the three banks are given.

There have been at Berlin as well as at Paris some years in which the rate of discount never varied at all, and there has been one year, though but one, at the Bank of England in which a similar occurrence took place. The particulars are as follows:—

YEARS IN WHICH NO CHANGE TOOK PLACE IN THE RATE OF DISCOUNT, 1844 TO 1878.

Bank of Eng	land.	Bank of Fra	ance. Bar	Bank of Germany				
1851		1844		1850				
_		1845	• • • • • • • • • • • • • • • • • • • •	1851				
_		1846		1852				
		1848		1860				
_		1849	••••••	1861				
_		1850	•••••	1862				
		1851		1867				
		1868	•••••	1868				
_		1869		–				
_		1875		-				

It will be observed from this table that there was one year alone in which all the three banks coincided in making no alterations in the rate charged, and that was in 1851. In one particular, and that not an unim-

portant one, there is a correspondence in the transactions of the Bank of England and the Bank of Germany, and that is in the great number of the variations in the rate of discount during recent years. It will assist us to compare the number of variations in the years from 1870 to 1878:—

VARIATIONS IN THE RATES OF DISCOUNT, 1870 TO 1878.

Years.	N Vai	of Er umber iation Rate.	s in	Var	umbe	er of ns in	N	f Germany. umber of iations in Rate.
						•		
1870	***************************************	10	• • • • • • • • • • • • • • • • • • • •	• • • • • • •	4			5
1871		10		• • • • • • •	2			2
1872		14			1		•••••	1
1873		24	•••••		4	•••••		7
1874		13		•••••	2	• • • • • • • • • • • • • • • • • • • •	•••••	4
1875		12		•••••	•••			5
1876	•••••	5	•••••	•••••	1	•••••	•••••	6
1877		7	•••••		1			7
1878		10		•••••	1	•••••	• • • • • • • • • • • • • • • • • • • •	3
			•••••		_			
		105			16	•••••	•••••	40
			•••••	•••••	_	•••••	•••••	_
	amount of varia-) from 1844 to 1878	264	•••••	••••••	86		•••••	88

The rate charged by the Bank of France remained but little altered during this particular period. Still, on examining the general table of variations, the same rule holds good throughout, that there has been of recent years a far greater number of variations in the rate of discount charged.

This tendency to greater variations in intensity, and to a greater number of fluctuations, must be expected to increase as commerce extends, and as business transactions not only become more numerous, but more closely connected. As is well known, the amount of foreign money employed in the London money market increased much during recent years, though, after the failure of the City of Glasgow Bank, it has distinctly diminished. When the London rate is lower than that ruling on the Continent, there is, of course, less inducement for English bills to be held in foreign countries. Hitherto, though enormous sums of English capital have been sent about to almost every country in the world, it has rather been directed to more fixed and

permanent investments than to employment in the money markets of foreign cities and capitals. The bonds of foreign Governments, of foreign railways, investments in industrial undertakings of almost every class, have all been largely supported by English capital. There is no need to make any detailed statement on this point, as the fact is so well known. But while the bonds of many foreign Governments are perfectly familiar to the English investor, he has scarcely any knowledge whatever of, or any experience in transactions in foreign bills. Hence, there are few, it almost might be said there are hardly any, foreign bills held in England; but the reverse of this is the case on the money markets of the Continent of Europe, where

English bills are not uncommonly held.

These bills can be forwarded to this country for collection in case their holders want the money, or the amount represented by them may be reinvested in fresh bills when the holders desire it. They provide thus a most convenient reserve for those who hold them. has been the feeling of confidence that first-class English bills would be paid in gold which has given them their position. The bonds of foreign Governments may be said to hold much the same place in England for these purposes that commercial bills on England do abroad, and often serve the purpose of making a remit-Thus during the autumn and winter of 1877 a very large quantity of foreign bonds, such as Russian and American bonds—particularly American Funded Loan —were sold by holders in this country and remitted to the Continent and to America. This circumstance doubtless tended to check the demand for gold for export which would probably otherwise have arisen. this instance, the holding these bonds in this country has been a service to us by preventing a drain on our bullion reserves which might have been very inconvenient. But it must be remembered that the current might equally, had circumstances favoured it, have turned in the other direction. And had the value of money risen on the principal money markets of Europe, or had there been any great uncertainty about the prospects of foreign politics, a very considerable drain on our bullion reserve might have been made through the means of those English commercial and Treasury Bills held at that

time so largely abroad.

As this practice extends, and as the communication between the money market of this country and those of the rest of Europe becomes closer, we must expect to see greater fluctuations occur in our own market. And the conclusion is obvious, that we are bound to take every precaution not only as to care in the details of business, but also by the formation and maintenance of a large bullion reserve in this country to meet the sudden demands which may, at any moment, be made on us. We reap a great advantage from the fact that our money market is the point where so many monetary transactions are carried on. We reap a great advantage also from the fact that commerce so largely centres in this country; but unless our position in the matter of reserves is a strong one, we shall be sure one day or another to find that the circumstances just referred to expose our business transactions to a great peril. have attained our present position by unremitting exertion; the same exertion must be continued if we desire to maintain it.

The evidence of increasing closeness of connection between the principal money markets of Europe, which is given by the tables of variation in the rates of discount charged in them, has led to these remarks. We must be content to keep a larger supply of "unused money" ready to meet the demands which may be made at any moment, if we desire to see a greater uniformity in the rate of discount charged here, and a diminution of those fluctuations which have of recent years caused so many perturbations in our market.

TABLE XII.—AVERAGE MONTHLY MINIMUM BATE OF DISCOUNT OF THE BANKS OF ENGLAND, FRANCE, AND GERMANY, FOR THE SEVENTEEN YEARS, 1845-1861, 1862-1878, AND FOR THE THIRTY-FOUR YEARS, 1845-1878.

	·-				BANK	OF	EN	GLA	ND.					
	184	5–6	1.			186	2-7	8.			184	5-7	8.	
Average 17 3	ear)	8,	of	Rate of 17 Years =100.	Averag 17 1 £3 1	rea:	rs,	of	Rate of 17 Years =100.	Average 34 3	Zea:	rs,	of	Rate of 34 Years = 100.
Jan	£	8. 1	d. 4	101	Jan	£ 3	19	d. 9	104	Jan	4	8. O	d. 6	103
Feb		19	3	99	Feb	3	10	9	92	Feb	3	15	0	96
March		0	4	100	March		10	0	91	March		15	2	96
April		18	8	99	April	3	10	4	91	April	3	14	6	95
May	4	1	6	101	Мау	4	0	8	105	May	4	1	1	104
June	3	16	9	96	June	3	15	2	98	June	3	15	11	98
July	3	14	10	94	July	3	11	10	94	July	3	13	4	94
August.	3	12	11	92	August.	3	13	6	95	August.	3	13	2	94
Sept	3	12	6	91	Sept	3	7	6	88	Sept	3	10	0	90
October	4	1	0	101	October	4	4	1	110	October	4	2	6	105
Nov	4	7	4	109	Nov	4	10	1	118	Nov	4	8	8	114
Dec	4	4	7_	106	Dec	4	4	4	110	Dec	4	4	5	108
					BANK	0	F F	RAN	CE.		_			
	184	5- (31.			186	32-7	8.			18	15-7	78.	
17	Average Rate of 17 Years, 24 4s. 11d. Rate of 17 Years = 100.				Averag	Yea.	rs,	s, Of 17 34 Years,					of	Rate of 34 Years =100.
-	£	8.	d.	100	-	£	В.	d.	100	T	£	8,	d.	405

1845-6	1.			1862-	-78.		1845-78.					
Average Rate of 17 Years, £4 4s. 11d.	of	Rate of 17 Years = 100.		e Rate Tears, 7s. 1d		Rate of 17 Years = 100.	34	e Rate o Years, 1s. 5d.	f	Rate of 34 Years =100.		
Jan & s. 4 7	d. 7	103	Jan		. d.	109	Jan	£ 8, 4 5	d. 10	105		
Feb 4 7	9	103	Feb	4	L 2	105	Feb	4 4	5	103		
March 4 5	9	101	March	3 1	4	103	March	4 2	7	101		
April 4 3	0	98	April	3 1	10	98	April	3 18	11	97		
May 4 3	5	98	May	3 1	5 11	99	May	3 19	8	97		
June 4 2	3	96	June	3 1	2 1	94	June	3 17	2	94		
July 4 1	9	96	July	3 1	2 10	96	July	3 17	3	94		
August. 4 1	4	95	August.	3 1	4 6	97	August.	3 17	11	95		
Sept 4 1	1	95	Sept	3 1	4 9	98	Sept	3 17	11	95		
October 4 6	10	103	October	4 (5	104	October	4 3	7	102		
Nov 4 10	0	106	Nov	4	3 6	108	Nov	4 6	9	106		
Dec 4 9	2	104	Dec	4 (9	106	Dec	4 4	11	104		
			BANK	OF G	ERM	ANY.						

					BANK	OF	GE	KMA	ANY.					
	184	!5 - 6	31.			186	2-7	8.			18	1 5-7	78.	
Averag	(ea	rs,	of	Rate of 17 Years = 100.	Average Rate of 17 Years, 24 10s. 8d. Rat of 1 Years = 10					Average 34)	Rate of 34 Years =100.			
Jan	£	8. 10	d. 9	102	Jan	£	8. 14	d. 0	104	Jan	£	12	d. 4	104
Feb	4	7	11	98	Feb	4	5	1	94	Feb	4	6	6	97
March	4	6	6	97	March	4	3	2	91	March	4	14	10	107
April	4	5	10	96	April	4	4	1	92	April	4	14	11	107
May	4	5	5	95	May	4	9	4	98	Мау	4	7	5	98
June	4	4	8	95	June	4	9	4	98	June	4	7	0	98
July	4	5	2	95	July	4	11	2	100	July	4	8	2	99
August.	4	4	5	94	August.	4	8	10	98	August.	4	6	7	97
Sept	4	5	6	95	Sept	4	9	7	98	Sept	4	7	6	98
October	4	10	0	101	October	4	18	10	109	October	4	14	5	106
Nov	4	11	2	102	Nov	4	18	5	108	Nov	4	14	9	107
Dec	4	11	8	103	Dec	4	17	7	108	Dec	4	14	7	106

TABLE XIII.—Banks of England, France, and Germany. Rate of Discount, 1844—1878. The Number of Days at each Rate, Arranged from the Highest Number to the Lowest.

BANK	of En	GLAND.	BANK	or F	BANCE.	BANK	of Gei	RMANY.
Number of Days, 12,535.	Per Cent.	Number of Days =1,000.	Number of Days, 12,535.	Per Cent.	Number of Days =1,000.	Number of Days, 12,535.	Per Cent.	Number of Days =1,000.
2,773 1,870 1,447 1,314 1,272 1,210 725 577 465 268 259 141 95 91 28	3 1 2 2 4 3 1 5 6 7 4 1 1 0 9 6 1 1 0 9 6 1 1 2 1 1	221 149 115 105 102 97 58 46 87 21 21 11 8	4,399 1,935 1,594 1,170 1,144 1,002 559 286 240 120 41 21 16 8	4 5 3 6 2 1 3 1 2 2 7 4 1 3 1 8 7 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1	351 154 127 93 92 80 45 23 19 10 3	7,796 2,497 1,139 562 210 83 63 54 50 44 37	45 46 7 5 9 13 15 67 8	622 199 91 45 17 7 5 4 4 3
12,535	24	1,000	12,535		1,000	12,535		1,000

TABLE XIII. Continued.—Banks of England, France, and Germant-Rate of Discount, 1844—1878. The Number of Days at each Rate, Arranged from the Lowest Rate to the Highest.

BAN	K OF EN	GLAND.	BAI	NK OF FI	ANCE.	BAN	к ог Сві	RMANY.
Per Cent.	Number of Days, 12,535.	Number of Days =1,000.	Per Cent.	Number of Days, 12,535.	Number of Days =1,000.	Per Cent.	Number of Days, 12,535.	Number of Days =1,000.
2 2 2 1 2 3 3 4 4 4 5 6 6 7 8	1,447 28 1,870 2,773 1,272 1,314 465 1,210 259 725 91 577 268	115 2 149 221 102 105 37 97 21 58 7 46 21	2 2 1 3 3 4 4 1 5 5 6 6 1 7 7 1 8	559 1,144 1,594 1,002 4,399 240 1,935 120 1,170 8 286 21 41	45 92 127 80 351 19 154 10 93 23	3½ 4 4½ 5 5½ 6 6¼ 7 7½ 8 9	54 7,796 1,139 2,497 83 562 50 210 44 37 63	4 622 91 199 7 45 4 17 3 3
10	95 141	8 11	9	16	1			
	12,535	1,000		12,535	1,000		12,535	1,000

CHAPTER XII.

BILLS DISCOUNTED AND TEMPORARY ADVANCES OF THE BANK OF ENGLAND.

THE manner in which the deposits held by the Bank are invested requires our attention.

The securities held by the Bank of England are divided in the usual weekly statements between the two heads of "Government" and "other" securities. It has not been thought necessary to make any analysis of the Government securities held by the Bank, as a large proportion of these securities, and, in particular, the amounts held in the circulation department, are so permanent in amount that no detailed statement appeared likely to be generally useful. The "other" securities are not included as a whole in the returns on which this analysis is based, but as a statement of their average amount would be of service in this investigation it has been supplied from the ordinary weekly accounts.

The total annual average amount of the "other" se-

curities will be found in col. 18 of Table I.

The increase in the sums thus held is large, and in a general way proportionate to the increase in the deposits.

Mr. Thomson Hankey intimated, in his remarks on the working and management of the Bank of England, that, while the deposits of the Bank should be invested in

TABLE XI.—Table of the Changes in the Rate of Discount Charged by the Bank of Germany, and the Number of Days at Each Rate in Each Year, since the 1st September, 1844 (the Year the Bank Act came into Operation in England), to December 31st, 1878.

rie H	No.	of Cha	anges.	31 %	4 %	41 %	5 %	51 %	6 %	61 %	7 %	71 %	8 %	9 %	Total
Years.	Rise.	Fall.	Total	Days	Days.	Days	Days.	Days	. Days.	Days	Days	Days.	Days.	Days	· Days
1844	1		1		41	76									117
1845	1	1	2		204	78	83								365
1846	1	1	2		121		244								365
1847		1	1			122	243								365
1848	1	1	2			256	110								366
1849		1	1		314	51									365
1850					365					· · ·					365
1851					365			/	1						365
1852					366			.4.							366
1853	1		1		273		92	1							365
1854		1	1		234		131)							365
1855	1		1		310	55		1							365
1856	3	1	4		121	7	138		100						366
1857	4	2	6				162	32	82	45		44			365
1858	1	4	5		330		19	11		5					365
1859	1	1	2		293		72								365
1860					366										366
1861					365										365
1862					365										365
1863	1		1		307	58	***								365
1864	3	1	4			124	128		54		60				366
1865	3	2	5		198		64		21		82				365
1866	1	7	8		18	45	87		79		68		5	63	365
1867					365										365
1868					366										366
1869	1		1		277		88								365
1870	2	3	5		150		163		20				32		365
1871		2	2		300	14	51								365
1872	1		1		260		106								366
1873	3	4	7		53	98	128		86						365
874	2	2	4		257	14	56		38						365
875	2	3	5		168		131		66						365
876	3	3	6	54	210	67	19		16						366
877	3	4	7		214	33	78	40							365
878	1	2	3		220	41	104								365
	41	47	88	54 7	7,796	1,139	2,497	83	562	50 2	210	44	37	63	12,535

CHAPTER XI.

SOME REMARKS ON THE RATE OF DISCOUNT OF THE BANKS OF ENGLAND, FRANCE, AND GERMANY.

A REVIEW of some of the more important points of similarity and contrast in the operations and the rate of discount of the three banks of England, France, and Germany, will not be out of place here.

In one respect there is a difference between the rate charged at the Bank of Germany and those charged at the other two banks between the years 1844 and 1878, and that is in the minimum rate of discount charged. Both the Bank of England and the Bank of France occasionally lowered their rates below 3 per cent. in the course of those years. During the period under review the rate charged by the Bank of England was as the rates named below:—

		K OF ENGLAND,			Days.
	per cent. for				
21	"	•••••			
2	23	•••••	• • • • • • • • • • • • •	••••••	1,870
					3.345
					0,020

That is to say, for more than one-fourth of the whole time at these low rates. Though the average rate charged by the Bank of France was not quite so low as that charged by the Bank of England, it has sometimes charged less than 3 per cent. for a considerable period. The rates in the time under our notice were as follows:—

BAN	E OF FRANCE, 1844 TO 1878.	Days.
2 per cent. for		559
		1,144
		1,703

Thus, in France, extremely low rates only prevailed for less than half the time that they did in England, but still in France the time which rates of 2 and 21 per cent. lasted was nearly one-eighth of the whole, a far from unimportant fraction. While, however, extremely low rates have thus prevailed for a considerable time in England, and for a long period, though not equally long, in France, the rate at Berlin never once dropped so low as 3 per cent., and was at 3½ per cent. for 54 days only during the years under our immediate notice. The rate was, however, fixed at 3 per cent. on March 21st, 1879, a point which had never been previously quoted. In one respect there is a similarity observable between the rate charged at Paris and at Berlin. In both cases the greatest number of days is recorded when the rate stood at 4 per cent., and in both cases also the next largest number to 4 per cent. was 5 per cent.

The particulars are as follows:—

Bank of France, 1844 to 1878. 4 per cent. for	Days. 4,399 1,935
BANK OF GERMANY, 1844 TO 1878.	6,334 Days.
4 per cent. for	7,796 2,4 97
	10,293
The corresponding figures in England wer	e:
BANK OF ENGLAND, 1844 TO 1878.	Days.
4 per cent. for	1,314 1,210
	2,524

It hence appears that these comparatively high rates were charged for the longest time in Germany; the next longest in France; and for the shortest time in England. But if the rate never fell below 31 per cent. in Berlin between 1844 and 1878, it never rose above 9 per cent., and, indeed, stood at that high point for 63 days only during the period under consideration, that is to say for a very inconsiderable fraction of the whole time. The average of the rate, however, charged in Berlin was higher than at London or at Paris. But the rate charged at Berlin was, though slightly, yet on the whole, the highest of the three banks; for if there were but comparatively few days at which extremely high rates of interest were charged, the length of time during which 5 per cent. and 4 per cent. lasted at Berlin has caused the average rate to be comparatively high. For the remaining variations in the rate we must refer our readers to the summary table at the end of this chapter, in which all the variations of the rate at each of the three banks are given.

There have been at Berlin as well as at Paris some years in which the rate of discount never varied at all, and there has been one year, though but one, at the Bank of England in which a similar occurrence took place. The particulars are as follows:—

YEARS IN WHICH NO CHANGE TOOK PLACE IN THE RATE OF DISCOUNT, 1844 TO 1878.

Bank of En	gland.	Bank of Fr	ance.	Bank of Germany.		
1851		1844		1850		
_		1845		1851		
		1846		1852		
		1848		1860		
_		1849		1861		
		1850		1862		
_		1851		1867		
		1868		1868		
		1869				
_		1875				

It will be observed from this table that there was one year alone in which all the three banks coincided in making no alterations in the rate charged, and that was in 1851. In one particular, and that not an unim-

portant one, there is a correspondence in the transactions of the Bank of England and the Bank of Germany, and that is in the great number of the variations in the rate of discount during recent years. It will assist us to compare the number of variations in the years from 1870 to 1878:—

VARIATIONS IN THE RATES OF DISCOUNT, 1870 TO 1878.

	N	ngland. r of s in	Bank of France. Number of Variations in			Bank of Germany. Number of Variations in		
Years.		Rate.			Bate			Rate.
1870		10			4			5
1871		10	•••••		2			2
1872		14	•••••		1	•••••		1
1873		24			4	•••••		7
1874		13			2	•••••		4
1875		12			•••	********		5
1876		5			1	•••••		6
1877		7	•••••		1			7
1878		10		• • • • • • • •	1	•••••	•••••	3
	•		•••••		_			
		105		• • • • • • •	16	•••••		40
				•••••	_	•••••		
	amount of varia-) from 1844 to 1878	264	•••••	•••••	86		•••••	88

The rate charged by the Bank of France remained but little altered during this particular period. Still, on examining the general table of variations, the same rule holds good throughout, that there has been of recent years a far greater number of variations in the rate of discount charged.

This tendency to greater variations in intensity, and to a greater number of fluctuations, must be expected to increase as commerce extends, and as business transactions not only become more numerous, but more closely connected. As is well known, the amount of foreign money employed in the London money market increased much during recent years, though, after the failure of the City of Glasgow Bank, it has distinctly diminished. When the London rate is lower than that ruling on the Continent, there is, of course, less inducement for English bills to be held in foreign countries. Hitherto, though enormous sums of English capital have been sent about to almost every country in the world, it has rather been directed to more fixed and

permanent investments than to employment in the money markets of foreign cities and capitals. The bonds of foreign Governments, of foreign railways, investments in industrial undertakings of almost every class, have all been largely supported by English capital. There is no need to make any detailed statement on this point, as the fact is so well known. But while the bonds of many foreign Governments are perfectly familiar to the English investor, he has scarcely any knowledge whatever of, or any experience in transactions in foreign bills. Hence, there are few, it almost might be said there are hardly any, foreign bills held in England; but the reverse of this is the case on the money markets of the Continent of Europe, where

English bills are not uncommonly held.

These bills can be forwarded to this country for collection in case their holders want the money, or the amount represented by them may be reinvested in fresh bills when the holders desire it. They provide thus a most convenient reserve for those who hold them. has been the feeling of confidence that first-class English bills would be paid in gold which has given them their position. The bonds of foreign Governments may be said to hold much the same place in England for these purposes that commercial bills on England do abroad, and often serve the purpose of making a remit-Thus during the autumn and winter of 1877 a very large quantity of foreign bonds, such as Russian and American bonds—particularly American Funded Loan —were sold by holders in this country and remitted to the Continent and to America. This circumstance doubtless tended to check the demand for gold for export which would probably otherwise have arisen. In this instance, the holding these bonds in this country has been a service to us by preventing a drain on our bullion reserves which might have been very inconvenient. But it must be remembered that the current might equally, had circumstances favoured it, have turned in the other direction. And had the value of money risen on the principal money markets of Europe, or had there been any great uncertainty about the prospects of foreign politics, a very considerable drain on our bullion reserve might have been made through the means of those English commercial and Treasury Bills held at that time so largely abroad.

As this practice extends, and as the communication between the money market of this country and those of the rest of Europe becomes closer, we must expect to see greater fluctuations occur in our own market. And the conclusion is obvious, that we are bound to take every precaution not only as to care in the details of business, but also by the formation and maintenance of a large bullion reserve in this country to meet the sudden demands which may, at any moment, be made on us. We reap a great advantage from the fact that our money market is the point where so many monetary transactions are carried on. We reap a great advantage also from the fact that commerce so largely centres in this country; but unless our position in the matter of reserves is a strong one, we shall be sure one day or another to find that the circumstances just referred to expose our business transactions to a great peril. have attained our present position by unremitting exertion; the same exertion must be continued if we desire to maintain it.

The evidence of increasing closeness of connection between the principal money markets of Europe, which is given by the tables of variation in the rates of discount charged in them, has led to these remarks. We must be content to keep a larger supply of "unused money" ready to meet the demands which may be made at any moment, if we desire to see a greater uniformity in the rate of discount charged here, and a diminution of those fluctuations which have of recent years caused so many perturbations in our market.

TABLE XII.—Average Monthly Minimum Rate of Discount of the Banks of England, France, and Germany, for the Seventeen Years, 1845-1861, 1862-1878, and for the Thirty-Four Years, 1845-1878.

BANK OF ENGLAND.

	_					_								
, 1845–61.				186	2-7	8.			1845-78.					
Averag 17 3 £3 1	Zea:	rs.	of	Rate of 17 Years =100.	Averag 17 £3 1	Year	rs,	of	Rate of 17 Years =100.	Average Rate of 34 Years, £3 17s. 9d.		Rate of 34 Years = 100.		
Jan Feb March April May June July August. Sept October Nov Dec	2434333334444	8. 19 0 18 1 16 14 12 12 17 4	d. 4 8 6 9 10 11 6 0 4 7	101 99 100 99 101 96 94 92 91 101 109	Jan Feb March April May June July August. Sept October Nov	3 4 3 3 3 3	19 10 10 10 0 15 11 13 7 4 10 4	d. 9 9 0 4 8 2 10 6 6 1 1	104 92 91 91 105 98 94 95 88 110 118	Jan Feb March April May June July August. Sept October Nov Dec	3 4 3 3 3	8. 0 15 15 14 1 15 13 13 10 2 8	d. 6 0 2 6 1 11 4 2 0 6 8 5	103 96 96 95 104 98 94 90 105 114 108
<u></u>	-30		<u> </u>	100	BANK	<u> </u>				Dec		_		100
	184	1 5–(51.		11		52-7		OII.	1	184	15-7	78.	
Averag	Yea	rs,	of	Rate of 17 Years =100.	Averag	Yea	rs,	of	Rate of 17 Years =100.	Averag 34 £4	Year	rs.	of	Rate of 34 Years =100.
Jan Feb March April May June July August. Sept October Nov Dec	£4444444444444444444444444444444444444	s. 7 7 7 5 3 3 2 1 1 1 6 10 9		103 103 101 98 98 96 96 95 95 103 106 104	Jan Feb March April May June July August. Sept October Nov Dec	3 3 3 3 4 4 4	15 12 12 14 14 0 3	1 10 6 9 5 6 9	109 105 103 98 99 94 96 97 98 104 108	Jan Feb March April May June July August. Sept October Nov Dec	3 3 3 3 4 4	19 17 17 17 17 17 3 6	d. 10 5 7 11 8 2 3 11 11 7 9	105 103 101 97 97 94 94 95 95 102 106 104
		4			BANK				ANY.		40.		<u> </u>	
Averag		45-		Rate	Averag		62-1		Rate	Averag		15-7		Rate
Averag	e n	wat U	O1	04 17	TAGLES	, on	wat b U	υL	of 17	Averag	υn	alu (υĽ	OF 94

1040-01.	100	<i>2</i> -70.		i	1040-70.			
Average Rate of 17 Years, £4 9s. 4d.	Rate of 17 Years =100.	17 Year	Average Rate of 17 Years, 24 10s. 8d. Average Rate of 17 Years, 24 10s. 8d. Average Rate of 34 Years, 24 8s. 10d.					
Jan 2 s. d. 4 10 9	102	Jan 2	s. d. 14 0	104	Jan	£ s. d. 4 12 4	104	
Feb 4 7 11	98	Feb 4	5 1	94	Feb	4 6 6	97	
March 4 6 6	97	March 4	3 2	91	March	4 14 10	107	
April 4 5 10	96	April 4	4 1	92	April	4 14 11	107	
May 4 5 5	95	May 4	9 4	98	May	4 7 5	98	
June 4 4 8	95	June 4	94	98	June	4 7 0	98	
July 4 5 2	95	July 4	11 2	100	July	4 8 2	99	
August. 4 4 5	94	August. 4	8 10	98	August.	4 6 7	97	
Sept 4 5 6	95	Sept 4	97	98	Sept	4 7 6	98	
October 4 10 0	101	October 4	18 10	109	October	4 14 5	106	
Nov 4 11 2	102	Nov 4	18 5	108	Nov	4 14 9	107	
Dec 4 11 8	103	Dec 4	17 7	108	Dec	4 14 7	106	

110 Days at Each Rate, Banks of England, France, & Germany.

TABLE XIII.—Banks of England, France, and Germany. Rate of Discount, 1844—1878. The Number of Days at each Rate, Arranged from the Highest Number to the Lowest.

BANK	of En	GLAND.	BANK	or F	BANCE.	BANK OF GERMANY.		
Number of Days, 12,535.	Per Cent.	Number of Days =1,000.	Number of Days, 12,535.	Per Cent.	Number of Days =1,000.	Number of Days, 12,535.	Per Cent.	Number of Days =1,000.
2,773 1,870 1,447 1,314 1,272 1,210 725 577 465 268	3 2½ 2 4 3½ 5 6 7 4⅓ 8	221 149 115 105 102 97 58 46 37 21	4,399 1,935 1,594 1,170 1,144 1,002 559 286 240 120	4 5 3 6 2 1 3 2 7 4 1 5	351 154 127 93 92 80 45 23 19	7,796 2,497 1,139 562 210 83 63 64 50	4 5 4 6 7 5 5 5 6 5 6 5 7 6 5 6 5 6 5 6 5 6 5	622 199 91 45 17 7 5 4 4 3 3
259 141 95 91 28	5 10 9 6 1 2 1	21 11 8 7 2	41 21 16 8	8 7½ 9 6½	3 2 1	37	8	3
12,535		1,000	12,535		1,000	12,535		1,000

TABLE XIII. Continued.—Banks of England, France, and Germant-Bate of Discount, 1844—1878. The Number of Days at each Rate, Arranged from the Lowest Rate to the Highest.

BANK OF ENGLAND.			BAI	NK OF FI	RANCE.	Ban	BANK OF GERMANY.		
Per Cent.	Number of Days, 12,535.	Number of Days =1,000.	Per Cent.	Number of Days, 12,535.	Number of Days =1,000.	Per Cent.	Number of Days, 12,535.	Number of Days =1,000.	
2 2 2 1 2 2 3 3 1 4 4 5 5 5 6 6 1 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	1,447 28 1,870 2,773 1,272 1,314 465 1,210 259 725 91 577 268 95	115 2 149 221 102 105 37 97 21 58 7 46 21	21333444355536643777389	559 1,144 1,594 1,002 4,399 240 1,935 120 1,170 8 286 21 41	45 92 127 80 351 19 154 10 93 23 2 3	3 1 4 4 5 5 5 1 5 6 6 6 1 7 7 1 8 9	54 7,796 1,139 2,497 83 562 50 210 44 37 63	4 622 91 199 7 45 4 17 3 3	
10	141	1,000		12,535	1,000		12,535	1,000	

CHAPTER XII.

BILLS DISCOUNTED AND TEMPORARY ADVANCES OF THE BANK OF ENGLAND.

THE manner in which the deposits held by the Bank are invested requires our attention.

The securities held by the Bank of England are divided in the usual weekly statements between the two heads of "Government" and "other" securities. It has not been thought necessary to make any analysis of the Government securities held by the Bank, as a large proportion of these securities, and, in particular, the amounts held in the circulation department, are so permanent in amount that no detailed statement appeared likely to be generally useful. The "other" securities are not included as a whole in the returns on which this analysis is based, but as a statement of their average amount would be of service in this investigation it has been supplied from the ordinary weekly accounts.

The total annual average amount of the "other" se-

curities will be found in col. 18 of Table I.

The increase in the sums thus held is large, and in a general way proportionate to the increase in the deposits.

Mr. Thomson Hankey intimated, in his remarks on the working and management of the Bank of England, that, while the deposits of the Bank should be invested in

good banking securities, such as bills of exchange, loans for short periods on good securities, Government stocks, &c., the capital may be invested in securities of a more permanent description. "With regard to the investment of the capital, no part of this is required to be kept in reserve: all may be invested in interest-bearing securities, which should be of undoubted character, but not necessarily of the same readily convertible nature as that part which is held liable to recall of deposits."—

"Hankey on Banking," pp. 13 and 14.

The capital and accumulated and undivided profits of the Bank of England (the "rest") amount together to about 17½ millions. The bills discounted and temporary advances have been separated in the tabular statement from the remainder of the "other securities" to as late a date as the published returns permit. It will be observed that the portion of the "other securities" which does not consist of bills discounted or of temporary advances, the annual average of which is given in col. 20 of Table I., has fluctuated less in amount for the last sixteen or eighteen years than the "bills discounted" or the "temporary advances." Guided by Mr. Thomson Hankey's remarks, we may suppose the sums indicated in col. 20 to be invested in loans to corporations for local improvements, to railways on their debentures, perhaps in securities of Colonial Governments, and in other securities more or less of a permanent character. Mr. H. L. Holland, deputy-governor of the Bank, stated in 1865 that the amount of railway debentures held at that time was about 4 millions. The fluctuations in the amount of the "other" securities will be found marked in col. 19 of Table I.

We now proceed to consider the amount of bills discounted by the Bank of England. The yearly average of these is given in col. 22 of Table I. Col. 23 contains the proportion of the yearly average to that of 1844. The fluctuations in the amount of bills discounted is very considerable. The amount for 1868 was only about one-half that of 1866, and, curiously enough, was very nearly similar to the average of 1845. There are

larger fluctuations also shown in the weekly statements than those between these annual averages.

In 1866 the highest an	nount was about 16 millions, the l	owest about 7 millions.

,, 1867	,,	8	35	4 1 ,,
,, 1868	,,	7	,,	4,,
,, 1869	33	7	,,	4 "
,, 1870	,,,	10	,,	5 "
,, 1871	,	u	,,	4 "
,, 1872	2)	9	,,	4 ,,
,, 1873		12	,,	4 ,,
,, 1874	"	6	,,	3 "
,, 1875	"	6	"	2 ,,

There was a considerable increase in this branch of the business of the Bank between 1844 and 1875; but it will be observed that the average of the three years, 1845-47, rather exceeded the average of the three years 1873-75, and the whole amount, though large, can form but a very small part of the total amount of bills, both inland and foreign, in circulation. The probable amount of these bills in circulation, including foreign bills, was estimated by myself as being probably from 300 to 350 millions in 1873. The total now in circulation (in 1879) does not probably exceed, if it even reaches, the smaller of these figures. Mr. Newmarch's estimate in 1851 was that the corresponding amounts then were from 180 to The influence of the Bank of England in 200 millions. the discount market is considerable; but its influence in this direction would not appear to be so large as in some other portions of its business, since its discounts have not increased in the same proportion as the bills themselves, nor had the discounts of the Bank continued to increase during the later years in which the published returns enabled us to trace the business of the Bank in this particular. A large portion of the deposits, it must be remembered, have been invested in more permanent securities. The proportion of bills discounted to "other" securities is given in col. 24, and it will be observed that the proportion of the resources of the Bank placed in bills has rather diminished in recent years. The table shows that it is in times of difficulty and pressure that the discounters of bills have recourse to the Bank. In 1857 and 1866 the amounts are large. In ordinary times there are beyond doubt private houses, as well as public companies, who do a larger business of this description than the Bank of England. In ordinary seasons the outside market is willing to accommodate its customers on slightly lower terms; and, in discounting bills, those who do the business at the lowest figure are sure to have the preference.

The immediate wants of business are, perhaps, to be found most distinctly indicated among the temporary advances made by the Bank of England. No branch of business of the Bank appears to undergo greater fluctuations than this one, and in none are the influences of periods of pressure more distinctly marked. The amount for 1872 was exactly three times as much as that in 1844. The business done in 1852 was little more than a sixth part of that done twenty years later. The steady growth of this branch of the business is very remarkable during the last ten years of which the particulars can be given. The annual averages will be found in col. 25, of Table I., and the proportion of each year to the amount in 1844 is given in col. 26. The fluctuations from week to week are far greater than those between the yearly averages.

In 1866 the highest amount was about 8 millions, the lowest about 1 million.

,, 1867	,,	4	,,	1 "
,, 1868	,,	4	,,	1,,
,, 1869	"	5	>>	1 "
" 1870	>>	9	2)	2 "
,, 1871	"	6	2)	1 ,,
,, 1872	"	10	,,	2 "
,, 1873	**	7	"	1 ,,
,, 1874	"	. 8	"	2 ,,
1875	••	9	••	z

The extension of the scale on which business is now done is curiously marked by the increase in these fluctuations during recent years. The requirements of occasional borrowers were actually greater, and the yearly averages higher, in the years 1870 and 1872, than even in the panic year of 1866.

It is much to be regretted that the information as to the amounts of bills discounted, and of the temporary advances, which used to be given in the returns up to the close of 1875 is now no longer supplied.

Recently, in September, 1878, the Bank put in force a rule requiring a margin of 5 per cent. on the securities guaranteed by the Indian Government pledged with it. This rule is, however, one of long standing with the Bank. It is always enforced with regard to advances on Consols, and if it had not been invariably required hitherto in the case of securities of the Indian Government, this probably was because these securities have generally been at a premium. Thus a margin was But when the securities stood at par, or a provided. small discount, a margin is needed to cover the advances The rate at which these advances have been made has been sometimes high—two per cent. above the rates charged for discounting bills. But what the Bank probably has said to those requiring these advances has been something like this: "We do not think your demand is one of a mercantile character; it is more like a Stock Exchange demand for short advances than a demand for legitimate trade purposes. If you bring us first-rate bills, we will discount them at our rate for bills, but we cannot place this demand of yours on the same footing."

After all, the Bank of England is, with respect to its private business, exactly in the same position as any other bank. It has only a certain definite sum which it can lend, and this it must husband, and not make advances which do not certainly return of themselves into money—as those made on good bills do—on the same terms as advances of the class we have been speaking of. The resources of the Bank are, doubtless, very large; but if it makes over-large advances on securities of a fixed character, it will experience the inconvenience of doing this just as any other bank would do. It cannot be said that the Bank is following a course otherwise than for the public interest in taking the line which is mentioned above. Whether the Bank may have given too great facilities for advances of this description in times past is another question; but in requiring a margin on the security for advances it is within the strict line of banking.

CHAPTER XIII.

NOTE CIRCULATION OF THE BANK OF ENGLAND AND THE BULLION HELD BY THE BANK.

THE amount of notes issued by the Bank now comes under consideration,

Annual averages of the note circulation will be found in cols. 27, 29, and 31 of Table I., which give the country circulation, the metropolitan circulation, and the amount of both these united. The extension of this portion of the business of the Bank was very small down to the year 1864. The increase up to that date was only about 4 per cent, which had advanced to 26 per cent. in 1872. The note circulation is issued partly in London, partly at the provincial branches of the Bank. The circulation has been divided under these two heads down to the close of 1875. The returns accessible do not continue this division to a later date. Up to 1875 the increase in the circulation, as will be seen by col. 27, was rather in the country than in the London circulation, which will be found in col. 29. The provincial circulation formed in 1873 and 1874 about 39 per cent. of the total circulation of the Bank, while in 1844 it formed only 32 per cent. of it. As the whole note circulation of England and Wales, including the notes issued by the private and joint stock banks, was £28,420,000 in 1844, £32,500,000 in 1877, and £32,400,000 in 1878, so the Bank of England notes issued at the country branches have clearly taken the place of lapsed local note issues, and this accounts for their greater increase than that of the metropolitan circulation. The total increase is, however, small; smaller than the augmentation in any other portion of the business of the Bank of England, which these returns enable us to trace, and far smaller than the increase in the metallic circulation of the country, which was estimated as being about 105 millions in 1872.* Mr. Newmarch estimated the gold circulation as 36 millions in 1844+. While, therefore, there has been an increase in the amount of coin in circulation of something like 70 millions, the total note circulation of England and Wales was in 1878 only 4 millions larger than it was in 1844. It is also quite possible that this increase, small as it is, may prove to be only temporary, as fluctuations of from 14 million to 2 millions are not uncommon between the average of one year and another in the note circulation, and the note circulation of the Bank of England was smaller during the earlier months of the year 1878 than during the corresponding months of 1877.

The following table shows the amounts and the proportions of the different denominations of notes composing the circulation of the Bank of England for the years 1856—1876, the earliest and the latest dates avail-The large notes, it will be seen, form now a smaller part of the whole circulation than they did twenty years since. The notes from £20 to £100 have remained comparatively stationary; the greater part of the increase is among the smaller notes, especially among those for £5. These, doubtless, as mentioned previously, in a great degree take the place of

the lapsed English country issues.

To complete this analysis, the annual average of bullion held by the Bank has been included. This average will be found in col. 33 Table I.: the columns marked 34, 35, 36, and 37, show the proportions which the bullion has borne to the liabilities on deposits and Bank post bills, to the note circulation, to the total liabilities under these two heads combined, and to the amount held in 1844. On the whole, the proportion of the bullion to the liabilities has been larger recently than during the earlier years over which this inquiry extends.

The Bank of England has sometimes held a consider-

^{*} Estimate based on Professor Jevons's statement, Statistical Society's Journal, 1868, p. 446, and account of "Coinage of Gold for Twenty-Four Years," Economist, 29th June, 1872.

† Tooke and Newmarch's "History of Prices," vol. vi., p. 701.

able amount of silver bullion. The Bank is empowered by the 3rd clause of the Act of 1844 to retain in the Issue Department an amount of silver bullion not exceeding one-fourth part of the gold coin and bullion held. The Bank has never held quite so large a proportion as this. The largest amount which it has held was £2,727,000 on October 3, 1846, when the gold bullion was quoted at £12,632,000. For the years from 1844 to 1847 the silver bullion formed, however, a considerable fraction of the total amount of bullion held. and the annual averages from 1844 to 1853 are given below. On August 20, 1853, the silver bullion ceased to be quoted in the returns of the Bank of England, though the heading and the space for the entry appear weekly in the return. Recently, the question, whether it might not be desirable that the Bank of England should hold silver bullion again, has been discussed in connection with the low quotation for the Indian exchanges. Should such an operation be undertaken by the Bank, it would probably now be under a guarantee from the Government, on whose behalf the business would be carried out. When the Bank Act was passed in 1844, "silver" was far more distinctly "money" throughout Europe than it is at the present time.

TABLE XIV.—Annual Averages of Silver Bullion Held by the Bank of England during the Years 1844—1853, and Proportion of the Same to the Gold Bullion and Coin Held.

Year.	Annual Average of Silver Bullion.	Proportion per Cent. of Silver Bullion to Total Bullion Held.	Annual Average of Bullion, in- cluding Gold and Silver Coin in Bank- ing Depart- ment.	Proportion per Cent. of Gold and Coin to Total Bullion Held.	Annual Average of Total Bullion and Coin.
	£	%	£	%	£
1844	1,640,000	11	13,024,000	89	14,664,000
1845	1,511,000	10	13,732,000	90	15,243,000
1846	2,169,000	15	12,616,000	85	14,785,000
1847	1,373,000	13	9,055,000	87	10,428,000
1848	1,125,000	8	12,747,000	92	13,872,000
1849	336,000	2	14,825,000	98	15,161,000
1850	195,000	1	16,441,000	99 .	16,636,000
1851	34,000	_	14,530,000	- 100	14,564,000
1852	28,000	_	20,559,000	100	20,587,000
1853	19,000	_	17,497,000	100	17,516,000

A considerable increase, larger on the whole than in the reserve, but smaller than that in the deposits, will be observed to have taken place in the bullion held. It has been mentioned that there appears to be no relation whatever between the amount of notes issued and the rate of interest charged. Nor is it easy to trace an exact relation between the amount of bullion held and the Bank rate. The average held in 1868 was more than 20 millions, with discount rate of 2 per cent.; the holding in 1873 was about 22 millions, with rate of 43 per cent.; the average held in 1876 was 28 millions, with a rate of about 2½ per cent.; and the differences shown by the weekly returns are greater still. Thus 7 per cent. was charged on 9th November, 1872, with £19,750,000 bullion held on the date of the nearest return, while 3 per cent. was charged on 4th November. 1869, with £18,500,000, more than a million less, held in a similar way. Again, 3 per cent. was charged 10th February, 1875, with 20 millions of bullion, and 5 per cent. was charged 17th October, 1877, with nearly 23 Though the total amount of millions of bullion. bullion held by the Bank is a very important thing, the rate of discount charged does not appear to be regulated by it.

To render this more clear, the percentage borne by the annual average of bullion with the Bank of England to the annual average of the banking liabilities has been stated in col. 34 of Table I. The fluctuations shown are considerable; the average, however, has hardly a tendency to increase, except in the years 1875-1876. In 1852 the average of bullion was 2½ per cent. more than the average of the banking liabilities. In 1847, 1856, 1864, and 1866, the average bullion was 65 per cent. of the banking liabilities. In 1857 it was only 56 per cent. of these. But though, generally speaking, the years when the average of bullion is low are those when the rate of interest is high, yet it is not possible to trace the same connection between the bullion and the rate of interest as between the banking reserve and the rate

of interest.

TABLE XV.—Table Showing Composition of Bank of England Notes Circulation. Divided According to the Denomination of the Notes in Hands of the Public from 1856 to 1876.

£5 Notes.	tion per Cent. to 1856.	Proportion per Cent. of £5 Notes to Total Circulation.	£10 Notes.	Proportion per Cent. to 1856.	Proportion per Cent. of £10 Notes to Total Circulation.	£20 to £100 Notes.	Proportion per Cent. to 1856. 1856=100	Proportion per Cent. of £20 to £100 Notes to Total Circulation.
1856 6,362,000 1857 6,386,000 1858 6,299,000 1859 6,673,000 1860 7,079,000 1861 6,673,000 1863 6,755,000 1863 6,755,000 1864 7,099,000 1865 7,403,000 1866 8,153,000 1866 8,290,000 1871 9,182,000 1871 9,182,000 1871 19,182,000 1872 9,704,000 1873 10,045,000 1874 10,474,000 1875 10,877,000	100 100 99 105 111 107 107 108 118 118 118 129 129 125 127 145 153 164 171 172	%3343333333333333333333333333333333333	3,928,000 3,959,000 3,896,000 4,145,000 4,045,000 4,045,000 4,045,000 4,462,000 4,462,000 4,462,000 4,462,000 4,463,000 4,514,000 4,514,000 4,712,000 4,712,000 4,712,000 4,712,000 4,712,000 4,712,000 4,712,000 5,003,000	100 101 99 105 109 103 104 100 101 104 118 1118 1118 1118 1119 120 120 120 121 122 126 127	% NIN 2000 2000 2000 2000 2000 2000 2000	5,474,000 5,530,000 5,652,000 5,652,000 5,947,000 6,172,000 6,172,000 6,183,000 6,183,000 7,222,000 7,234,000 6,904,000 7,373,000 7,435,000 7,435,000 7,435,000 7,435,000	101 103 119 116 116 118 119 119 119 119 127 128 133 134 133 134 133 136 141	***************************************
	£200 to £500 Notes.	Proportion per Cent. to 1856. 1856 = 100.	£200 to	£1,000 Notes.	Pro- portion per Cent. to 1856. 1856 = 100.	Proportion per Cent. of £1,000 Notes to Total Circulation.	Total Oircula- tion.	Propertien per Cent. of Total Circulation to 1856. 1856 = 100.
1856 1857 1858 1858 1859 1860 1861 1862 1863 1864 1863 1864 1865 1866 1867 1868	1,375,000 1,385,600 1,590,000 1,510,000 1,551,000 1,444,000 1,697,000 1,740,000 1,831,000 1,827,000 1,867,000 1,761,000 1,761,000 1,774,000	100 99 116 117 113 105 123 127 123 133 133 133 136 128 124 129	%7778877788888888777777777777777777777	1,865,000 1,796,000 2,313,000 2,256,000 2,029,000 1,911,000 2,098,000 2,089,000 1,849,000 1,761,000 1,795,000 1,834,000 1,825,000 1,676,000 1,676,000 1,768,000	100 96 124 121 109 102 112 112 99 94 96 98 98 99 99	%0911110010099888877777777777777777777777	19,004,000 19,036,000 20,810,000 21,270,000 20,820,000 20,620,000 20,675,000 20,586,000 21,096,000 23,463,000 23,454,000 23,132,000 23,132,000 23,454,000 24,603,000	100 100 104 109 119 105 108 108 111 122 123 123 123 123 123 123

Note.—For years 1856 to 1859, inclusive, these averages represent the first 15 weeks of each year; from 1860 to 1876, inclusive, the averages are of the whole circulation of the year.

CHAPTER XIV.

THE PROPORTION WHICH THE RESERVE HELD BY THE BANK OF ENGLAND BORE TO THE DEPOSITS AND TO THE BANKERS' BALANCES ON THE NEAREST RETURN TO THE DATE OF EACH CHANGE IN THE BANK RATE OF DISCOUNT FOR THE YEARS 1844—78, INCLUSIVE.

In calculating the proportion of the reserve to the deposits, the gold and silver coin held in the Banking Department, as well as the reserve of notes, have been included in the reserve. The liabilities in the shape of Bank post bills are added to the deposits in the calculation mentioned. This is because the amount of the reserve of notes alone is given in the returns, and the short bills are not included in them. In forming an estimate of the liabilities of the Bank of England both these items should be taken into account, and they have therefore been included in order to insure accuracy in the statement. The influence, however, of these sums is but small. The annual averages showing the extent of the circulation of short bills are in Table I., col. 3.

This statement is given in two forms. In the first, the proportions are arranged according to the dates the nearest to those on which the changes occurred. In the second, the return for each date over which a particular rate extends are arranged in the order of the highest proportion of reserve to deposits first, the other returns following to the minimum of each rate.

It will be observed that the proportion of the reserve to the liabilities was as follows during the sharpest

pressure of the last three crises:—

23rd October, 1847.—Reserve 14 per cent. of the liabilities. The London bankers' balances formed 81 per cent. of the reserve. Bank rate 8 per cent.

11th November, 1857.—Reserve 8 per cent. of the liabilities, but only sufficient to meet 31 per cent. of the bankers' balances. Bank rate 10 per cent.

16th May, 1866.—Reserve 5 per cent. of the liabilities, but only sufficient to meet 15 per cent. of the bankers' balances. Bank rate 10 per cent.

The increased severity of each crisis will be found marked in the smaller proportion of the reserve on each of the later occasions, both to the liabilities and the bankers' balances. The principle of the Act of 1844 was not actually infringed at any of these three dates.

It appears desirable, while investigating this point, to give an arrangement of these proportions in order of dates, as well as according to each rate, because the one arrangement is of very material assistance in understanding the other. Thus, in looking at the proportion of reserve to deposits during the prevalence of the rate of 4 per cent., we find that rate charged on 2nd August, 1865, with no greater reserve than 31 per cent. of the deposits; a proportion at which, from the information supplied by other portions of this table, it might have been more naturally expected that 7, 8, or even 9 per cent. would have been charged. On looking to the chronological table, the explanation of this becomes clear. 2nd August, 1865, marks nearly the com-

mencement of that rise in the rate of discount which culminated in the crisis of 1866. Barely six weeks before, there had been a reserve of 45 per cent., with a rate of 3 per cent., and during the whole of the twelve months preceding and following the Bank rate had been subject to very extraordinary fluctuations. fectly true that the Bank rate has in many cases fluctuated considerably, while the average of the proportions of the reserve has remained almost the same. Thus, by looking down the general averages of the proportion of the reserve to deposits, on the nearest dates corresponding with each change, it will be seen that three different rates, 6, 5, and 5 per cent., have all been charged, with an average proportion of reserve of about 36 per cent.; and, what might have been as little expected, the fluctuations of the reserve have been greater while 5 per cent. has been charged (from 50 to 20 per cent.) than while 6 per cent. has been charged (in this case from 48 to 24 per cent.). Still, though individual cases may be found which differ from the average, yet in general a low Bank reserve will necessarily be found accompanied by a high rate of interest.

In order to give a more distinct idea of the magnitude of the sums concerned, and of their proportions to the general business of the country, the amounts of the reserve of the Bank of England, of the London bankers' balances, and of the weekly returns of the Clearing House at the nearest date to each alteration of the Bank of England rate during the year 1877 are added in Table XVI., and of the reserve and the weekly returns of the Clearing House at each corresponding date in 1878. We see from these figures how great at any moment may be the demands on the reserve of the Bank of England.

Tables XVII. and XVIII. follow, showing the proportion of the reserve of the Bank of England to the liabilities, and of the balances of the London bankers to the reserve at the nearest date given to every change in the rate of interest from 5th September, 1844, to 31st December, 1878.

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TABLE XVI.—STATEMENT OF THE ALTERATIONS IN THE BANK OF ENGLAND BATE OF DISCOUNT FOR 1877-78, WITH THE RESERVE OF THE BANK OF ENGLAND, THE LONDON BANKEES' BALANCES, AND THE CLEARING HOUSE RETURNS, AT THE NEAREST DATE TO EACH CHANGE. (London Bankers' Balances not given for 1878.)

1077

		1877.		
Date.	Rate.	Reserve of Bank of England.	London Bankers' Ba- lances.	Clearing House Re- turns.
	%	£	£	£
3rd May	á	10,926,636	8,926,000	18,389,000
5th July	21	13,174,000	10,890,000	11,888,000
12th ,,	2	13,911,797	12,139,000	14,588,000
28th August	3	12,128,674	9,870,000	12,665,000
4th October	4	9,721,173	8;820,000	15,024,000
11th ,,	5	9,431,126	8,876,000	13,364,000
29th November	4	11,547,182	9,555,000	26,186,000

1878.

Date.	Rate.	Reserve of Bank of England.	London Bankers' Ba- lances.	Clearing House Re- turns.
	%	£	£	£
9th January	3	11,902,216		15,311,000
30th ,,	2	12,981,690		14,263,000
27th March	3	11,916,320	Not Published	12,887,000
29th May	21/2	11,338,102		14,135,000
26th June	3	10,858,129	for these dates.	13,916,000
3rd July	31/2	9,081,692		18,706,000
31st ,,	4	8,903,407		39,708,000
12th August	5	8,912,764		12,554,000
14th October	6	8,517,315		13,542,000
20th November	5	12,310,802		12,772,000

TABLE XVII.—Proportions of the Reserve of the Bank of England to Liabilities, and of the Balances of London Bankers to the Reserve on the Nearest Date Given to Every Change in the Rate of Interest, from 5th September, 1844, to 31st December, 1878. Arranged According to the Dates when Changes Occurred.

Bank Rate.		Date.	Proportion per Cent. of Reserve to Liabilities.	Proportion per Cent. of London Bankers' Balances to Reserve.	Proportion per Cent. of Reserve to London Bankers' Balances.		
214	1844	5th September	68	11	_		
3 3 <u>1</u>	1845	16th October 6th November	38 38	42 22	=		
3	1846	27th August	<i>5</i> 8	19	· –		
3 1 4 5 5 1 5 6 8 7 6 5	1847 "" "" ""	14th January 21st " 8th April 30th September 25th October 22nd November 2nd December 23rd "	43 20 36 26 13	19 23 74 26 23 84 36 27	- - - - - - - - -		
4 3 1 3	1848	27th January 15th June 2nd November	52 63 61	44 16 33	=		
21	1849	22nd November	66	13	_		
3	1850	26th December	48	11	_		
2 1 2	1852	1st January 22nd April	61 64	12 40	=		
21 3 31 4 41 5	1853	6th January 20th ,, 2nd June 1st September 15th ,, 29th ,,	47 47 40	35 24 27 21 27 37	_ _ _ _		
5] 5	1854	11th May 3rd August	. 37 . 49	43 33	=		
41/3 4 31/3 4 41/3 5 51/4	1855	5th April	. 52 . 63 . 41 . 40 . 33	35 37 30 38 30 43 45			
7	"	18th "	. 29	52	<u> </u>		

This is the first statement in the Returns, and marks the point at which the Act of 1844 came into operation.

CHAPTER XIII.

NOTE CIRCULATION OF THE BANK OF ENGLAND AND THE BULLION HELD BY THE BANK.

THE amount of notes issued by the Bank now comes under consideration,

Annual averages of the note circulation will be found in cols. 27, 29, and 31 of Table I., which give the country circulation, the metropolitan circulation, and the amount of both these united. The extension of this portion of the business of the Bank was very small down to the year 1864. The increase up to that date was only about 4 per cent., which had advanced to 26 per cent. in 1872. The note circulation is issued partly in London, partly at the provincial branches of the Bank. The circulation has been divided under these two heads down to the close of 1875. The returns accessible do not continue this division to a later date. Up to 1875 the increase in the circulation, as will be seen by col. 27, was rather in the country than in the London circulation, which will be found in col. 29. provincial circulation formed in 1873 and 1874 about 39 per cent. of the total circulation of the Bank, while in 1844 it formed only 32 per cent. of it. As the whole note circulation of England and Wales, including the notes issued by the private and joint stock banks, was £28,420,000 in 1844, £32,500,000 in 1877, and £32,400,000 in 1878, so the Bank of England notes issued at the country branches have clearly taken the place of lapsed local note issues, and this accounts for their greater increase than that of the metropolitan circulation. The total increase is, however, small; smaller than the augmentation in any other portion of the business of the Bank of England, which these returns enable us to trace, and far smaller than the increase in the metallic circulation of the country, which was estimated as being about 105 millions in 1872.* Mr. Newmarch estimated the gold circulation as 36 millions in 1844+. While, therefore, there has been an increase in the amount of coin in circulation of something like 70 millions, the total note circulation of England and Wales was in 1878 only 4 millions larger than it was in 1844. It is also quite possible that this increase, small as it is, may prove to be only temporary, as fluctuations of from 15 million to 2 millions are not uncommon between the average of one year and another in the note circulation, and the note circulation of the Bank of England was smaller during the earlier months of the year 1878 than during the corresponding months of 1877.

The following table shows the amounts and the proportions of the different denominations of notes composing the circulation of the Bank of England for the years 1856—1876, the earliest and the latest dates avail-The large notes, it will be seen, form now a smaller part of the whole circulation than they did twenty years since. The notes from £20 to £100 have remained comparatively stationary; the greater part of the increase is among the smaller notes, especially among those for £5. These, doubtless, as mentioned previously, in a great degree take the place of the lapsed English country issues.

To complete this analysis, the annual average of bullion held by the Bank has been included. This average will be found in col. 33 Table I.; the columns marked 34, 35, 36, and 37, show the proportions which the bullion has borne to the liabilities on deposits and Bank post bills, to the note circulation, to the total liabilities under these two heads combined, and to the amount On the whole, the proportion of the held in 1844. bullion to the liabilities has been larger recently than during the earlier years over which this inquiry extends.

* Estimate based on Professor Jevons's statement, Statistical Society's Journal, 1868, p. 446, and account of "Coinage of Gold for Twenty-Four Years," Economist, 29th June, 1872.
† Tooke and Newmarch's "History of Prices," vol. vi., p. 701.

The Bank of England has sometimes held a consider-

able amount of silver bullion. The Bank is empowered by the 3rd clause of the Act of 1844 to retain in the Issue Department an amount of silver bullion not exceeding one-fourth part of the gold coin and bullion held. The Bank has never held quite so large a proportion as this. The largest amount which it has held was £2,727,000 on October 3, 1846, when the gold bullion was quoted at £12,632,000. For the years from 1844 to 1847 the silver bullion formed, however, a considerable fraction of the total amount of bullion held. and the annual averages from 1844 to 1853 are given On August 20, 1853, the silver bullion ceased to be quoted in the returns of the Bank of England, though the heading and the space for the entry appear weekly in the return. Recently, the question, whether it might not be desirable that the Bank of England should hold silver bullion again, has been discussed in connection with the low quotation for the Indian exchanges. Should such an operation be undertaken by the Bank, it would probably now be under a guarantee from the Government, on whose behalf the business would be carried out. When the Bank Act was passed in 1844, "silver" was far more distinctly "money" throughout Europe than it is at the present time.

TABLE XIV.—Annual Averages of Silver Bullion Held by the Bank of England during the Years 1844—1853, and Proportion of the Same to the Gold Bullion and Coin Held.

Year.	Annual Average of Silver Bullion.	Proportion per Cent. of Silver Bullion to Total Bullion Held.	Annual Average of Bullion, in- cluding Gold and Silver Coin in Bank- ing Depart- ment.	Proportion per Cent. of Gold and Coin to Total Bullion Held.	Annual Average of Total Bullion and Coin.
	£	%	£	%	£
1844	1,640,000	11	13,024,000	89	14,664,000
1845	1,511,000	10	13,732,000	90	15,243,000
1846	2,169,000	15	12,616,000	85	14,785,000
1847	1,373,000	13	9,055,000	87	10,428,000
1848	1,125,000	8	12,747,000	92	13,872,000
1849	336,000	2	14,825,000	98	15,161,000
1850	195,000	1	16,441,000	99 .	16,636,000
1851	34,000	_	14,530,000	- 100	14,564,000
1852	28,000	_	20,559,000	100	20,587,000
1853	19,000	_	17,497,000	100	17,516,000

A considerable increase, larger on the whole than in the reserve, but smaller than that in the deposits, will be observed to have taken place in the bullion held. It has been mentioned that there appears to be no relation whatever between the amount of notes issued and the rate of interest charged. Nor is it easy to trace an exact relation between the amount of bullion held and the Bank rate. The average held in 1868 was more than 20 millions, with discount rate of 2 per cent.; the holding in 1873 was about 22 millions, with rate of 43 per cent.; the average held in 1876 was 28 millions, with a rate of about 21 per cent.; and the differences shown by the weekly returns are greater still. Thus 7 per cent. was charged on 9th November, 1872, with £19,750,000 bullion held on the date of the nearest return, while 3 per cent. was charged on 4th November, 1869, with £18,500,000, more than a million less, held in a similar way. Again, 3 per cent. was charged 10th February, 1875, with 20 millions of bullion, and 5 per cent. was charged 17th October, 1877, with nearly 23 Though the total amount of millions of bullion. bullion held by the Bank is a very important thing, the rate of discount charged does not appear to be regulated by it.

To render this more clear, the percentage borne by the annual average of bullion with the Bank of England to the annual average of the banking liabilities has been stated in col. 34 of Table I. The fluctuations shown are considerable; the average, however, has hardly a tendency to increase, except in the years 1875-1876. In 1852 the average of bullion was $2\frac{1}{2}$ per cent. more than the average of the banking liabilities. In 1847, 1856, 1864, and 1866, the average bullion was 65 per cent. of the banking liabilities. In 1857 it was only 56 per cent. of these. But though, generally speaking, the years when the average of bullion is low are those when the rate of interest is high, yet it is not possible to trace the same connection between the bullion and the rate of interest as between the banking reserve and the rate

of interest.

TABLE XV.—TABLE Showing Composition of Bank of England Notes CIECULATION. Divided According to the Denomination of the Notes in Hands of the Public from 1856 to 1876.

£5 Notes.	tion per Cent.	Proportion per Cent. of £5 Notes to Total Circulation.	£10 Notes.	Proportion per Cent. to 1856.	Proportion per Cent. of £10 Notes to Tetal Circulation.	£20 to £100 Notes.	Proportion per Cent. to 1856. 1856=100	Proportion per Cent. of £20 to £100 Notes to Total Circulation.
1856 6,362,000 1857 6,386,000 1858 6,299,000 1859 6,678,000 1861 6,673,000 1862 6,799,000 1863 6,755,000 1863 6,755,000 1868 7,009,000 1868 8,153,000 1867 8,290,000 1879 8,695,000 1870 8,695,000 1871 9,182,000 1872 9,704,000 1873 10,445,000 1874 10,474,000 1875 10,677,000 1876 10,920,000	100 100 99 105 111 107 107 106 118 116 129 139 139 145 153 163 164 171	%33.433.33333333335555555555555555555555	3,928,000 3,959,000 3,896,000 4,145,000 4,280,000 4,045,000 4,085,000 3,946,900 4,462,000 4,462,000 4,514,000 4,514,000 4,712,000 4,712,000 4,712,000 4,712,000 4,712,000 4,712,000 4,712,000 4,712,000 4,712,000 4,712,000 4,712,000 5,003,000	100 101 99 108 109 103 104 113 114 116 117 118 119 120 120 120	%11200000000000000000000000000000000000	5,474,000 5,580,000 5,652,000 6,121,000 6,931,000 6,172,000 6,172,000 6,153,000 6,153,000 7,224,000 6,204,000 7,273,000 7,373,000 7,373,000 7,435,000 7,495,000 7,495,000	101 103 119 116 108 113 119 109 118 127 128 132 133 134 133 134 133 136 141	***************************************
	£200 to £500 Notes.	Pro- portion per Cent. to 1856. 1856 = 100.	£200 to	£1,000 Notes.	Pro- portion per Centto 1856. 1856 = 100.	Proportion per Cent. of £1,000 Notes to Total Circulation.	Total Circula- tion.	Proportion per Cent. of Total Circulation to 1856.
1856 1857 1858 1859 1860 1861 1862 1863 1864 1863 1864 1865 1866 1867 1870 1871 1872 1873 1874 1874 1875 1876	1,885,000 1,590,000 1,510,000 1,511,000 1,544,000 1,697,000 1,740,000 1,831,000 1,831,000 1,761,000 1,761,000 1,774,000 1,784,000 1,810,000	100 99 116 117 113 105 123 123 123 133 136 128 124 129 130 131 130 131 131 132 144	%7778877788888888777777777777777777777	1,865,000 1,796,000 2,256,000 2,256,000 2,029,000 1,911,000 1,911,000 1,761,000 1,795,000 1,834,000 1,834,000 1,835,000 1,835,000 1,835,000 1,835,000 1,835,000 1,835,000 1,835,000 1,835,000 1,835,000 1,835,000 1,845,000 1,485,000	100 96 124 121 109 102 112 99 94 96 98 89 90 96 101 97 98	10 9 11 11 10 10 10 10 10 10 10 10 10 10 10	19,004,000 19,036,000 19,765,000 20,810,000 20,810,000 20,020,000 20,020,000 20,675,000 20,586,000 21,096,000 23,198,000 23,454,000 23,454,000 24,603,060 25,525,000 26,284,000 27,347,000 27,347,000 27,733,000	100 100 104 109 119 105 108 108 111 128 123 123 123 130 134 135 138 144

Note.—For years 1856 to 1859, inclusive, these averages represent the first 15 weeks of each year; from 1860 to 1876, inclusive, the averages are of the whole circulation of the year.

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This statement is given in two forms. In the first, the proportions are arranged according to the dates the nearest to those on which the changes occurred. In the second, the return for each date over which a particular rate extends are arranged in the order of the highest proportion of reserve to deposits first, the other returns following to the minimum of each rate.

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pressure of the last three crises:—

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The increased severity of each crisis will be found marked in the smaller proportion of the reserve on each of the later occasions, both to the liabilities and the bankers' balances. The principle of the Act of 1844 was not actually infringed at any of these three dates.

It appears desirable, while investigating this point, to give an arrangement of these proportions in order of dates, as well as according to each rate, because the one arrangement is of very material assistance in understanding the other. Thus, in looking at the proportion of reserve to deposits during the prevalence of the rate of 4 per cent., we find that rate charged on 2nd August, 1865, with no greater reserve than 31 per cent. of the deposits; a proportion at which, from the information supplied by other portions of this table, it might have been more naturally expected that 7, 8, or even 9 per cent. would have been charged. On looking to the chronological table, the explanation of this becomes clear. 2nd August, 1865, marks nearly the com-

mencement of that rise in the rate of discount which culminated in the crisis of 1866. Barely six weeks before, there had been a reserve of 45 per cent., with a rate of 3 per cent., and during the whole of the twelve months preceding and following the Bank rate had been subject to very extraordinary fluctuations. It is perfectly true that the Bank rate has in many cases fluctuated considerably, while the average of the proportions of the reserve has remained almost the same. Thus, by looking down the general averages of the proportion of the reserve to deposits, on the nearest dates corresponding with each change, it will be seen that three different rates, 6, 5, and 5 per cent., have all been charged, with an average proportion of reserve of about 36 per cent.; and, what might have been as little expected, the fluctuations of the reserve have been greater while 5 per cent. has been charged (from 50 to 20 per cent.) than while 6 per cent. has been charged (in this case from 48 to 24 per cent.). Still, though individual cases may be found which differ from the average, yet in general a low Bank reserve will necessarily be found accompanied by a high rate of interest.

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Tables XVII. and XVIII. follow, showing the proportion of the reserve of the Bank of England to the liabilities, and of the balances of the London bankers to the reserve at the nearest date given to every change in the rate of interest from 5th September, 1844, to 31st December, 1878.

20th November ...

5

TABLE XVI.—STATEMENT OF THE ALTERATIONS IN THE BANK OF ENGLAND BATE OF DISCOUNT FOR 1877-78, WITH THE RESERVE OF THE BANK OF ENGLAND, THE LONDON BANKERS' BALANCES, AND THE CLEARING HOUSE RETURNS, AT THE NEAREST DATE TO EACH CHANGE. (London Bankers' Balances not given for 1878.)

1877.								
Date.	Rate.	Reserve of Bank of England.	London Bankers' Ba- lances.	Clearing House Re- turns.				
	%	£	£	£				
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1878.							
Date.	Rate.	Reserve of Bank of England.	London Bankers' Ba- lances.	Clearing House Re- turns.			
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	-	40 040 000		0.01			

12,310,802

12,772,000

TABLE XVII.—Propositions of the Reserve of the Bank of England to Liabilities, and of the Balances of London Bankers to the Reserve on the Nearest Date Given to Every Change in the Rate of Interest, from 5th September, 1844, to 31st December, 1878. Arranged According to the Dates when Changes Occurred.

Bank Rate.	-	Date.	Proportion per Cent. of Reserve to Liabilities.	Proportion per Cent. of London Bankers' Balances to Reserve.	Proportion per Cent. of Reserve to London Bankers' Balances.
21*	1844	5th September	68	11	_
3 3 1	1845	16th October 6th November		42 22	_
3	1846	27th August	1	19	
31	1847	14th January	44	19	
4	,,	21st ,,	43	23	_
5	,,	8th April	. 20	74	= = = = = = = = = = = = = = = = = = = =
51	,,	5th August	36	26	_
6		30th September		23	l
8	"	25th October			
	"			84	_
7	"	22nd November		36	_
6	,,	2nd December		27	-
5	"	23rd "	46	17	_
4	1848	27th January	. 52	44	
31		15th June		16	
	"	2nd November		1	_
3	" .		l	33	
21	1849	22nd November	. 66	13	_
3	1850	26th December	. 4 8	11	_
21	1852	1st January	. 61	12	_
2		22nd April		40	
_	"	-		40	
21	1853	6th January	. 4 8	35	
3	,,	20th ,,		24	=
31	,,	2nd June	. 47	27	—
4	,,	1st September	. 47	21	-
44	,,	15th "	1 40	27	_
5	,,	29th "	0.4	37	_
٠,	10"	1111 15	~~		1
5⅓	1854	11th May	. 37	43	-
5	,,	3rd August	. 49	33	_
41	1855	5th April	. 50	35	I -
4	1	3rd May	1		1
	"			37	1 =
31	"	14th June		30	_
4,	"	6th September.		38	-
41	,,	13th ,,		30	_
5	,,	27th " .	<i>33</i>	43	-
5 }	,,	4th October	. 32	45	1 —
7	,,	18th "	. 29	52	<u> </u>
	' "		,	·	`

^{*} This is the first statement in the Returns, and marks the point at which the Act of 1844 came into operation.

TABLE XVII. Continued.—Proportions of the Reserve of the Bank of England, &c. Arranged According to Dates.

Bank Rate.	Date.		Proportion per Cent. of Reserve to Liabilities.	Proportion per Cent. of London Bankers' Balances to Reserve.	Proportion per Cent. of Reserve to London Bankers' Balances.
6	1856	22nd May	36	75	l <u> </u>
5		0047	41		
	"		49	51	
44	"	26th June		34	_
5	22	2nd October	23	67	_
7	,,	9th "	21	67	_
6 <u>₹</u>	,,	4th December	35	47	_
6	,,	18th "	37	39	_
	i .			_	
6}	1857	2nd April	22	60	-
6	,,	18th June	<i>38</i>	38	_
51	,,	16th July	42	55	_
6	,,	8th October	24	56	_
7	",	15th ,,	23	89	_
8	l	19th ,,	24	90	
ğ	"	5th November	15		80
10	"	OTF.	7	_	30
8	"	24th December	34	78	30
0	"	24m December	0 -2	76	
6	1858	7tb June	33	84	
5			35 35	04	80
-	"	9017	46	96	80
4	,,	28th ,,		86	_
3 1	"	4th February	47	76	
3	,,,	11th ,	53	63	_
21	,,	9th December	60	26	_
61	1050	0043- 4	471		
3 1	1859	28th April	47	46	
41	"	5th May	42	55	_
8 1	"	2nd June	46	59	_
8	,,	9th "	47	52	_
21	,,	14th July	48	57	
_					
3	1860	19th January	40	54	
4	,,	31st "	37	45	_
41	,,	29th March	35	35	_
5	,,	12th April	26	75	_
41	23	10th May	<i>3</i> 8	49	_
4	,,	24th "	4 3		_
41	,,	8th November	80	47 66	_
5	,,	13th "	37	55	_
6	,,	15th ,,	37	55	_
5	"	29th ,,	41	59	
6	,,	31st December	31	59	_
	"				
7	1861	7th January	31	98	
. 8	,,	14th February	36	55	= = = = = = = = = = = = = = = = = = = =
7	,,	21st March	41	44	_
Ġ	,,	4th April	<i>38</i>	51	_
Š	,,	11th ,,	40	<u>69</u>	_
6	1	16th May	36		
5	"	1st August	39	53 61	
41	"	1 7 74 1.	42	58	
-43	","	1 15th ,,	1 20		

TABLE XVII. Continued.—Proportions of the Reserve of the Bank of England, &c. Arranged According to Dates.

					
Bank Rate.	1001	Date.	Proportion per Cent. of Reserve to Liabilities.	Proportion per Cent. of London Bankers' Balances to Reserve.	Proportion per Cent. of Reserve to London Bankers' Balances.
4	1861	29th August	46	бо	-
3 1	,,	19th September	4 8	52	_
3		7th November	43	62	
•	"	102 210 102202		02	İ
0.1	1000	OLL Tammann	٠, ,	l	
21	1862	9th January	44	71	_
3	,,	22nd May	47	48	-
2 1	,,	10th July	42	69	_
2	,,	24th ,	45	68	_
3	1	30th October	39	65	l
U	"	BOTH OCTOBER	03	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
	1000	1541 T	20	. م	1
4	1863	15th January	39	69	-
5	٠,,	28th	40	52	-
4	,,	19th February	46	45	- - - - - - - - - - - - - - - - - - -
31	1	23rd April	43	62	
3	"	1 0011	43	46	l _
	"		41		
3 }	,,,	16th May		49	
4	"	21st ,,	38	53	_
5	,,	2nd November	36	76	_
6	,,	5th ,,	31	72	
7	,,	2nd December	· 32	68	
8		3rd ,,	32	68	
7	1	041	39	49	<u> </u>
•	,,,	2400 ,,	""	עד	l
8	1864	90th Tonnows	83	61	i
	1804	20th January	1		. –
7	"	11th February	38	47	
6	,,	25th ,,	43	47	_
7	,,	16th April	32	75 66	_
8	,,	2nd May	28	66	
9	,,	5th ,,	28	66	- - - - - - -
8	,,	19th ,,	33	71	—
7		26th ,,	37	64	
6	"	16th June	40		
	"		31	54	
7	, ,,	25th July		77	_
8	,,,	4th August	29	85	. –
9	"	8th September	35	69	_
8	"	10th November	40	85	<u> </u>
7	,,	24th	45	70	_
6	,,	15th December	48	50	_
	"		l	1	-
54	1865	12th January	39	83	1
5		26th ,,	44	62	l —
44	"	3rd March	44	53	l
4	"	90+1	42		l <u> </u>
	"	,		47	_
44	"	4th May	36	65	<u> </u>
4.	,,	25th ,,	41	54	
81	,,	1st June	41	56	-
8	٠,,	15th ,,	44	46	_
81	,,	27th July	33	l Šī	<u> </u>
4	,,	3rd August	26	78	I —
44	",	28th September	33	68	
5	1	2nd October	24	82	l
	,,,	=114 October	· ~=	, 02	

TABLE XVII. Continued.—Proportions of the Reserve of the Bank of England &c. Arranged According to Dates.

Bank Rate.		Date.	Proportion per Cent. of Reserve to Liabilities.	Proportion per Cent. of London Bankers' Balances to Reserve.	Proportion per Cent. of Reserve to London Bankers' Balances.
6	1865	5th October	24	82	_
7	,,,	7th ,,	24	86	_
6	"	23rd November	43	57	
7	"	28th December	34	65	_
	"			•3	
8	1866	4th January	26		97
7	,,	22nd February	45	57	
6	,,	15th March	45	51	
7	,,	3rd May	3 0	8 9	
8	,,	8th ,	29	86	
9		11th "	29	86	
10	,,	12th "	29	86	
8	,,	16th August	21		69
7	"	23rd "	24		68
6	,,	30th ,	30	_	87
5	,,	6th September	30		96
41	,,	27th ,	36	77	
4	99	8th November	3 8	75	
8 1	,,	20th December	44	50	-
8	1867	7th February	45	63	-
21	"	30th May	47	49	
2	"	25th July	53	64	_
21	1868	19th November	40	6-	İ
3		3rd December	39	61	_
o	29	ord December	39	64	-
4	1869	1st April	34	69	
44		6th May	35	68	
4	"	10th June	44	65	
31	"	24th ,,	48	53	
3	",	15th July	44	69	
21	",	19th August	55	55	- - - -
3	,,	4th November	44	57	
_		1			
31	1870	21st July	43	66	_
4	,,,	23rd "	43	66	_
5	,,,	28th ,,	36	8o	
6	,,,	4th August	3 4	85	_
5 1	,,	11th ,,	3 8	85	-
41	,,,	18th ,,	42	8 o	_
4	,,	25th ,,	45	79	_
31	,,	1st September	4 6	72	-
3	,,	15th "	51	59	_
21	"	29th "	<i>55</i>	48	_
8	1871	2nd March	41	6-	
2 }			41 43	65	_
2 1	"	13th April 15th June	43 59	58	
2	"	13th July	59 51	38	
8	".			74	
	' ,,	21st September	อบ	49	

TABLE XVII. Continued.—Proportions of the Reserve of the Bank of England, &c. Arranged According to the Dates

Bank Rate.		Date.	Proportion per Cent. of Reserve to Liabilities.	Proportion per Cent. of London Bankers' Balances to Reserve.	Proportion per Cent. of Reserve to London Bankers' Balances.
4	1871	28th September	37	70	
5		7th October	32		91
4	,,	16th November	49	83	_
34	,,	30th ,,	52	62	
3	"	14th December	54	47	l
u	"	Trem December	"-	7/	
31	1872	4th April	35	60	1
4		4711	33	80	_
_	"	9th May	33		
5	"	l nout	40	75	
4	"	30th ,,		58	· –
31/2	"	13th June	45	47	_
3	,,	20th ,,	46	45	-
3 }	,,	18th July	41	70	-
4	,,	18th September	39	69	i —
4 1	,,	26th ,,	37	71	l –
5	,,	3rd October	32	79	
6	,,	10th ,,	32	93	
7	,,	9th November	35	70	I —
6	,,	28th ,,	46	63	
5	,,	12th December	50	55	_
•	"			00	
44	1873	9th January	49	68	
4	,,	23rd ,,	53	50	
31	l .	DOLL	54	46	
4	,,	26th March	38	54	l
41	"	8th May	33		
5	"	4013	33	73	
6	"	1511	32	73	
7	,,,	4th June	32	76	
7 6	"	1041		74	
•	,,	12th ,,	36	66	_
5	,,	10th July	43	83	
44	,,	17th ,,	46	74	_
4	,,	24th ,,	49	7 I	
3 1	,,	31st ,,	50	63	_
8	,,	21st August	53	62	
4	,,	25th September	44	8 o	
5	,,	29th ,,	<i>34</i>	_	94
6	,,	14th October	31	_	83
· 7	,,	18th ,,	31	_	83
8	,,	1st November	37	96	_
9	,,	7th ,,	35	_	90
8	,,	20th ,,	41	93	_
6	,,	27th ,,	46	8ŏ	_
5	,,	4th December	45	79	_
43	,,	11th "	48	70	_
-			i	•	
4	1874	8th January	43	90	
3 1	,,	15th	46	84	—
4	1	30th April	31	73	
8 <u>1</u>	,,	28th May	43	69	
8	"	4th June	44	64	· _
	, ,,	. zvm o une			

TABLE XVII. Continued.—Proportions of the Reserve of the Bank of England, &c. Arranged According to Dates.

Bank Rate.		Date.	Proportion per Cent. of Reserve to Liabilities.	Proportion per Cent. of London Bankers' Balances to Reserve.	Proportion per Cent. of Reserve to London Bankers' Balances.
21	1874	18th June	4 8	63	
8	,,,	30th July	47	75	_
4	,,,	6th August	41	84	_
81	**	20th ,,	47	76	
3	,,,	27th ,,	48	77	l —
4		15th October	36		85
5	,,,	16th November	40	90	
6	"	30th ,,	41	87	_
5	1875	7th January	40	98	
4	,,,	14th ,,	45	85	_
3	,,	28th ,,	50	82	
31	, ,	18th February	41	8o	
3	,,	8th July	42	_	95
$\frac{2\frac{1}{4}}{2}$,,	29th ,,	51	95	
2 21	"	12th August	52	89	
24 31	"	7th October	39 35		93
4	"	01-4	36	_	79
3	"	18th November	43 /		85
4	"	30th December	33	94	97
5 4	1876	6th January 27th ,,	29 43	97 83	_
81	,,	23rd March	46	64	
3	,,	6th April	45	71	
2	,,	20th ,	48	8 9	
3	1877	3rd May	37	82	_
21	,,	5th July	42	82	
2	,,	12th ,,	46	87	= = = =
3	,,	28th August	44	8r	
4	,,	4th October	37	91	_
5	,,	11th "	35	94	
4	"	29th November	47	83	
8	1878	9th January	40	_	
2	,,	30th ,,	44	_	_
3	,,	27th March	33		_
21	"	29th May	4 0	_	_
3	,,	26th June	3 6		
81	,,,	3rd July	31		
4	,,,	31st "	34		
5	,,	12th August	<i>36</i>	_	_
6	"	14th October	28	_	
5	,, ,	20th November	41	_	

TABLE XVIII.—Proportions of the Reserve of the Bank of England to Liabilities, and of the Balances of London Bankers to the Reserve on the Nearest Date Given to Every Change in the Rate of Interest, from 5th September, 1844, to 31st December, 1878. Arranged from the Highest Proportion of the Reserve to the Lowest.

Bank Rate.		Date.	Proportion per Cent. of Reserve to Liabilities.	Proportion per Cent. of London Bankers' Balances to Reserve.	Proportion per Cent. of Reserve to London Bankers' Balances.
10	1866	12th May	29	86	
,,	1857	9th November	7		30
,,		000 2:0:0000000000000000000000000000000	,		
9	1864	8th September	35	69	
-	1873	7th November			90
"	1866	11th May	29	86	
,,	1864	PAR.	28	66	_
**	1857			00	80
,,	1007	5th November	15	_	80
•	1050	2013		1	i
8	1873	20th ,,	41	93	_
,,	1864	10th ,,	40	85	-
99	1873	1st ,,	37	96	
,,	1861	14th February	36	55	-
,,	1857	24th December	84	78	
,,	1864	20th January	33	бі	
,,	,,	19th May	33	71	_
"	1863	3rd December	32	68	
,,	1864	4th August	29	85	l —
,,	1866	8th May	1 12	86	
	1864	2nd ,,	28	66	l
,,	1866	4th January	100		97
,,	1857	19th October	24	00	0,
"	1866	16th August	21	90	69
,,	1847	25th October	13	-	09
**	104/	Zeth Oewber	13	84	_
7	1864	OAAL Mamamahan	45		
7		24th November	45	70	-
,,	1866	22nd February	45	57	_
39	1861	21st March	41	44	_
"	1863	24th December	39	49	
,,,	1864	11th February	38	47	
,,	29	26th May	37	64	_
,,	1872	9th November	85	70	_
,,,	1865	28th December	84	65	
,,	1863	2nd December		68	_
,,	1864	16th April	32	75	
,,	1873	4th June		74	
,,,	1861	7th January	31	98	-
,,	1864	25th July	31	77	
,,	1873	18th October	31		83
,,	1847	22nd November	30	36	
"	1866	3rd May	30	89	_
"	1855	18th October	29	52	
"	1856	9th October	21	67	
"	1865	7th ,,	24	86	
"	1866	23rd August	24		68
	1857	15th October	23	89	
,,	-00'				
6 1	1856	4th December	35	47	
_	1857	2nd April	83	47 60	l
"	1301		00	, w	
6	1864	15th December	48	50	
	. 1004	1 TOM DOCCHIDEL	1 10	50	
				K	2

TABLE XVIII. Continued.—Proportions of the Reserve of the Bank of England, &c. Arranged According to Proportion of Reserve.

Bank Rate.		Date.	Proportion per Cent. of Reserve to Liabilities.	Proportion per Cent. of London Bankers' Balances to Reserve.	Proportion per Cent. of Reserve to London Bankers' Balances.
6	1872	28th November	4 6	63	_
,,	1873	27th "	46	8ŏ	_
,,	1866	15th March	45	51	-
"	1864	25th February	43	47	
,,	1865	23rd November	43	57	_
"	1874	30th ,,	41	87	
"	1857	16th June	4 0 3 8	54	
**	1861	18th ,,	38	38	_
"	1856	18th December	37	51	_
,,	1860	15th November	37	39	
"	1847	2nd December	36	55 27	
"	1856	22nd May	36	75	_
, »	1861	16th "	36		_
, ,,	1873	12th June	36	53 66	_
"	1870	4th August	34	85	_
"	1858	7th January	3 3	84	
"	1872	10th October	32	93	
**	1873	17th May	32	76	_
"	1860	31st December	<i>31</i>	59	-
"	1863	5th November	31	72	
,,	1873 1866	14th October	31 30		83
"	1878	30th August 14th October	28	_	87
"	1847	30th September	26 26		_
"	1857	8th October	24 24	23 56	
"	1865	5th "	24	82	_
51	1857	16th July	42	55	_
,,	1865	12th January	39	83	_
,,	1870	11th August	<i>3</i> 8	85	_
,,	1854	11th May	37	43	_
"	1847	5th August	36	24	
"	1855	4th October	32	45	_
Б	1872	12th December	50	55	
**	1854	3rd August	49	33	_
,,	1847	23rd December	46 45	17	_
,,	1865	26th January	45 44	79 62	_
"	1873	10th July	43	83	_
"	1856	29th May	41	51	_
,,	1860	29th November	41	59	_
"	1878	20th "	41		
,,	1861	11th April	40	69	_
**	1863	28th January	4 0	52	
**	1874	16th November	4 0	90	
"	1875	7th January	40	98	_
,,	1861	1st August	39	бі	
,,	1860 1863	13th November 2nd	37	55	_
	1 1003	zna "	36	76	

TABLE XVIII. Continued.—Proportions of the Reserve of the Bank of England, &c. Arranged According to Proportion of Reserve.

Bank Rate.	Date.		Proportion per Cent. of Reserve to Liabilities.	Proportion per Cent. of London Bankers' Balances to Reserve.	Proportion per Cent. of Reserve to London Bankers' Balances.		
5	1870	28th July	36	8o			
"	1878	12th August	36	_			
"	1858	14th January	35	_	80		
,,	1877	11th October	35	94	_		
"	1853	29th September	34	37	_		
"	1873	29th ,	34	<u> </u>	94		
,,	1855	27th ,,	33	43	_		
,,	1872	9th May	33	75	_		
,,	1873	10th ,,	33	73			
,,	1871	7th October	32		91		
,,	1872	3rd ,,	32	79	_		
,,	1866	6th September	30	_	96		
,,	1876	6th January	29	97			
,,	1860	12th April	26	75 82	_		
,,	1865	2nd October	24	82			
,,	1856	2nd October	23	67	_		
"	1847	8th April	20	74	_		
41	1860	8th November	80	66			
_	1855	5th April	50	35			
,,	1856	26th June	49	34			
"	1873	9th January	49	68			
"	,,	11th December	48	70			
"	,,	17th July	46	74			
,,	1865	3rd March	44	53			
,,	1859	5th May	42	55	_		
"	1861	15th August	42	58	_		
,,	1870	18th ,,	42	8o	_		
,,	1853	15th September	40	27			
,,	1855	13th ,,	40	30	_		
>>	1860	10th May	38	49	_		
,,	1872	26th September		71			
,,	1865	4th May	36	65	! —		
>>	1866	27th September		77	l —		
)) ~	1860	29th March		35	_		
,,	1869	6th May		68	-		
,,,	1865	28th September		68	_		
"	1873	8th May	33	73	_		
4	1873	23rd January	53	50	_		
,,	1848	27th ,,		44	-		
"	1855	3rd May	52	37	I —		
,,	1871	16th Nov mber	49	83	<u> </u>		
,,	1873	24th July	49	71	I -		
,,	1853	1st September	. 47	21	_		
"	1877	29th November		83	_		
**	1858	28th January		86	_		
"	1861	29th A = gust		60	-		
"	1863	19th Fe ruary		45	-		
,,	1870	25 h August		79 85	-		
_ " _	1875	14th January	. 45	1 85	<u> </u>		

TABLE XVIII. Continued.—Proportions of the Reserve of the Bank of England, &c. Arranged According to Proportion of Reserve.

Bank		Date	Proportion per Cent. of	Proportion per Cent. of London	Proportion per Cent. of Reserve
Rate.		Date.	Reserve to Liabilities.	Bankers' Balances to Reserve.	to London Bankers' Balances.
4	1878	25th September	44	8o	
22	1869	10th June	44	65	-
33	1847	21st January	43	23	_
,,	1860	24th May	43	47	
,,	1870 1874	28rd July	43	66	_
"	1876	8th January	43	90	_
**	1865	25 75	43 42	83	<u> </u>
**	1855	6th September	41	47	_
"	1865	25th May		38	=
,,	1874	6th August		54 84	_
,,	1872	30th May		58	_
"	1863	15th January		69	_
,,	1872	18th September		69	l
,,	1863	21st May		53	
,,	1866	8th November	38	75	_
**	1873	26th March		54	_
"	1860	31st January		45	_
**	1871	28th September		70	_
"	1877	4th October	37	91	_
٠,	1874	15th ,	36	_	85
"	1875	21st ,,	36		85
,,,	1869	1st April		69	_
"	1878	31st July	34	_	_
,,,	1872	11th April	33	80	-
"	1874	30th December			97
**	1865	30th April		73	_
,,	1000	ora August	20	78	-
8}	1848	15th June	63	16	_
"	1855	14th "	63	30	_
2)	1873	30th January		46	_
"	1871	30th November		62	<u> </u>
,,	1873	31st July		63	_
"	1861	19th September		52	-
"	1869 1853	24th June		53	_
,,	1858	2nd "		27	_
"	1859	4th February	47	76	-
,,	1874	28th April 20th August	47 47	46	
"	1859	2nd June	46	76	_
"	1870	1st September		59	
"	1874	15th January		72 84	1 =
"	1876	23rd March	46	64	
"	1872	13th June	45	47	_
,,	1847	14th January		19	_
,,	1866	20th December	44	50	_
,,	1863	23rd April	43	62	
,,	1870	21st July	43	66	_
,,,	1874	28th May	43	69	-
	1863	16th "	41	49	

TABLE XVIII. Continued.—Proportions of the Reserve of the Bank of England, &c. Arranged According to Proportion of Reserve.

		, ,	Proportion	Proportion per Cent. of	Proportion per Cent. of
Bank			per Cent. of	London	Reserve
- To .	,	Date.	Reserve	Bankers'	to London
Rate.			to Liabilities.	Balances to Reserve.	Bankers' Balances.
31	1865	1st June	41	56	
,,	1872	18th July	41	70	_
39	1875	18th February	41	8o	_
"	1845 1872	6th November	38 35	22	_
,,	1865	4th April	33 33	81 81	
"	1875	14th October	35	01	79
"	1878	3rd July	31	_	
"		ora cary mining	02		l <u> </u>
3	1848	2nd November	61	33	_
,,	1846	27th August	58	19	_
,,	1871	14th December	54	47	
,,	1858	11th February	53	63	
99	1873	21st August	53	62	-
"	1870	15th September		59	_
,,	1871	21st ,,	50	49	_
,,	1875	28th January	50	82	_
99	1853 1850	20th ,	49	24	
,,	1874	26th December	48	11	_
"	1859	27th August 9th June	48 47	77	_
"	1862	22nd May	47	52	_
3) 31	1874	30th July	47	48 75	_
,,	1872	20th June	46	45	_
,,	1867	7th February		63	
,,	1876	6th April		71	_
,,	1865	15th June	44	46	_
29	1869	15th July	44	69	
,,	1869	4th November	44	57	_
22	1874	4th June	44	64	_
99	1877	28th August	44	81	<u> </u>
22	1861	7th November	43	62	_
99	1863 1875	30th April	43	46	_
22	1875	18th November 8th July	43 42	94	95
"	1871	2nd March	41	65	50
"	1860	19th January	40	65	
"	1878	9th ,,	40	54	_
"	1862	30th October	39	65	
"	1868	3rd December	39	64	_
,,	1845	16th October	3 8	42	_
2.5	1877	3rd May	87	82	_
"	1878	26th June	36		
20	"	27th March	83	_	
21	1844	5th September	68	11	
"	1849	22nd November	66	13	_
>>	1852	1st January	61	12	
"	1858	9th December	60	26	-
"	1869	19th August		55 48	-
	1870	29th September	55	48	·

TABLE XVIII. Continued.—Proportions of the Reserve of the Bank of England, &c. Arranged According to Proportion of Reserve.

Bank Rate.		Date.	Proportion per Cent. of Reserve to Liabilities.	Proportion per Cent. of London Bankers' Balances to Reserve.	Proportion per Cent. of Reserve to London Bankers' Balances.
21	1875	29th July	51	95	_
"	1853	6th January	48	35	
"	1859	14th July	48	57	
"	1874	18th June	48	63	
,,	1867	30th May	47	49	_
,,	1862	9th January	44	71	_
22	1871	13th April	43	58	_
22	1862	10th July		69	
,,	1877	5th ,,		82	-
"	1868	19th November		бі	
,,	1878	29th May		-	_
,,	1875	7th October	39	-	93
21	1871	15th June	59	38	_
2	1852	22nd April	64	40	
,,	1867	25th July		64	-
,,	1875	12th August		89	_
,,	1871	13th July		74	_
,,	1876			89	-
,,	1877	12th July		87	1 -
,,	1862	24th "		68	_
,,	1878	30th January	44		<u> </u>

Prior to 31st October, 1857, the returns of the Bank of England were dated to Saturday, subsequent to that date to Wednesday.

GENERAL	AVERAGES	OF	PRECEDING	TABLES.
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Bank Rate.	Times Changed.	Average Proportion per Cent. of Reserve to Liabilities.	Average Proportion per Cent. of London Bankers' Balances to Reserve.
10	2	18	86
	5	28	73
8	15	30	78
9 8 7 6 1	21	32	73 78 67
61	2	29	53
6	2 8	36	53 61
5 1	6	37	56
5	33	36	67
41	20	43	56 67 58 64 56
4	40	56	64
31/2	30	45	56
3	35	45	57
$2\frac{1}{2}$	18	50	50 38
21	1	59	38
2	8	50	73
Number of changes in rate	} 264	_	_

CHAPTER XV.

CONCLUSION.

THERE are several other points in the statements contained in this volume which may be indicated, though they cannot be followed out further. For instance, it will be found that the amount of the bankers' balances with the Bank of England on the second return in each half-year, that is to say, the second return in the months of January and July, is considerably above the total average of each year, and there is a very marked augmentation in these amounts during the later compared with the earlier years included in the returns. This periodic fluctuation is undoubtedly connected with the payments of the dividends on the funds, and on other fixed securities, and a similar though smaller fluctuation is observable at the corresponding dates in April and October. This increase is probably due to larger amounts of stock held as reserve by the banks of the country generally, and also to larger amounts of dividends received on account of customers. We must bear in mind that the years from 1844 to 1878 have witnessed a very large increase indeed in the business of banking in the United Kingdom. Many persons have accounts with a bank now, who—or their predecessors in similar positions in life—would not have had banking accounts at the earlier date. The increase on the dates mentioned marks this alteration in the habits of the

country, and is interesting on that account.

This point is mentioned, among others, which a careful investigation of the returns relating to the Bank of England will enable the reader to trace. Many matters connected with the conduct of business, many incidents in the transactions of the day which have influenced the adoption of a particular rate on a given occasion, cannot be recorded in the returns from which the figures in this statement have been condensed. We have in this shape but the dry bones, so to speak, of events, all-important at the time to the well-being of the country; but it is hoped that this analysis will be of service in assisting us to thread the history of the past, and may also be of some use in enabling us to see what is needed at the present time.

The subject which was proposed to be investigated in preparing this statement, was the relation of the reserve to the current rate of interest charged. A study of this analysis shows the truth of the usual conclusion, that the rates of discount charged by the Bank of England are regulated more by the proportion of the reserve to liabilities than by any other consideration. That the amount of the bankers' balances, and the proportion they bear to the reserve, may have a bearing on the rates charged is very probable, though their influence is not clearly marked in the tables. The state of the foreign exchanges, quoted for the great European centres of business—Paris, Amsterdam, Hamburgh, and, we must now add, Frankfort and Berlin, as representative of Germany -influences the Bank rate very greatly, though this does not show so much on the surface, as an unfavourable exchange is accompanied by an outflow of bullion, and hence by an immediate diminution of the reserve. It is well known that the directors of the Bank, when fixing the rate to be charged, take the state of the foreign exchanges into careful consideration. The Bank possesses still, though other powerful banking institutions have grown up round it, and appear at first sight to overpower it, so strong an influence over our money market that by setting the rate high enough it can always control the foreign exchanges; hence foreign exchanges generally appear to follow, rather than to lead, the Bank of England rate of discount. No correspondence whatever can be traced between the amount of notes issued and the rate of interest charged. Nor does any other branch of business conducted by the Bank appear to affect it in any way. The proportion of the reserve to the liabilities is the cardinal point on which the rate of interest charged by the Bank turns.

We may observe in this fact a remarkable and exact instance of the operation of one of the principal laws of economic science—the law of demand and supply. The rate of interest generally, as Mr. Ricardo has stated in his "Principles of Political Economy," "is regulated by the rate of profits which can be made by the employ-

ment of capital."*

Mr. Ricardo adds, what is equally obvious: "The rate of interest, though ultimately and permanently governed by the rate of profit, is, however, subject to temporary variations from other causes."† A diminished or increased demand is chief among these, and the extent of these temporary variations is best exhibited in the position of the Bank of England reserve, from the fact that the Bank of England also holds the reserve of the other banks in the country. Within the period over which the investigation extends, the amount of money in the country generally has enormously increased. The gold in circulation is nearly three times the amount it was some thirty years ago. Yet, while the amount of deposits held by the banks of the country —that is to say, of loanable capital—has also been greatly increased, we have far more frequent and rapid

^{*} Page 220, edition 1852.

[†] Page 179.

variations in the Bank rate of interest, and often also a

higher rate.

The explanation of this is that the total amount held in reserve has not increased in a like proportion with the demands which may be made on the reserve; meanwhile, from the altered character of that reserve, there is a greater liability to sudden demands, owing to the vast increase in banking deposits in the United Kingdom during the last five-and-twenty years.

Mr. Newmarch estimated these deposits in 1851 at 260 millions; to which may be added for foreign and colonial banks 25 millions, an aggregate of something like 300 millions. The corresponding figures at the present time are probably between 650 and 700 mil-

lions.

This very great increase in the amounts held on deposit during the last five-and-twenty years may at any moment give occasion for a very considerable demand on the banking reserve. The reserve held by the Bank itself is now somewhat smaller in proportion to its own liabilities than it was in the earlier years over which this survey extends. Meanwhile, the general banking liabilities of the country have enormously increased.

To throw the whole of the duty of maintaining an adequate reserve on the Bank of England is obviously unfair, yet this is the tendency of business in recent years. The keeping a larger supply of unused money would also undoubtedly tend to more equable rates, which would be of great advantage to the commerce of the country. Yet we do not seem nearer to the attainment of a really sufficient reserve than we were when the Bank Act of 1844 was passed. To provide a compulsory amount of reserve by legal enactment would be undesirable, but the object might be arranged without difficulty if an agreement on the subject by the principal banks of the country could be attained.

It is not, in any time of pressure, the amount of capital in the country which is taken into account, or which governs the immediate price of money. It is

not the amount in circulation. It is the actual amount of reserve in hand at the time which decides the stability of the money market. Many exceptional causes, it will be said, have led to the recent fluctuations in the money market, to the vast number of changes in the rate of interest in recent years. But with the immensely extended commerce now carried on by this country, such causes, or similar causes, will be certain continually to manifest themselves, and the only safe course is to be prepared to meet them. To do this we must be prepared to increase the amount of "unused" capital in the country, now so exceedingly small. It is most desirable that proper steps should be taken for the attainment of this, which is essential to the security of banking in this country. It is hoped that the preceding pages may assist to throw some light on the present bearings of this important question. In banking, the only secure position is that of strength, and that strength is connected most closely with the maintenance of an adequate reserve.

THE END.

TABLE XVIII. Continued.—Proportions of the Reserve of the Bank of England, &c. Arranged According to Proportion of Reserve.

				 	
Bank Rate.		Date.	Proportion per Cent. of Reserve to Liabilities.	Proportion per Cent. of London Bankers' Balances to Reserve.	Proportion per Cent. of Reserve to London Bankers' Balances.
6	1872	28th November	46	63	
,,	1873	27th	46	80	_
"	1866	15th March	45	51	
,,	1864	25th February	43	47	
"	1865	23rd November	43	57	
,,	1874	30th "	41	87	
"	1864	16th June	40	54	_
"	1857	18th ,,	38	38	
"	1861	4th April	38	51	
"	1856	18th December	37	39	
"	1860	15th November	37	55	
"	1847	2nd December	36	27	
"	1856	22nd May	36		_
•	1861	16th ,,	36	75 52	
. <i>99</i>	1873	12th June	36	53 66	
	1870	4th August	34	85	
**	1858	7th January	33	84	
,,	1872	10th October	32		
"	1873	17th May	32	93	
,,	1860	31st December	31	76 50	
"	1863	5th November	31	59	_
,,	1873	14th October	31	72	83
"	1866	30th August	30		87
,,	1878	14th October	28		01
"	1847	30th September	26		
,,	1857	8th October	24	23 56	
,,	1865	P13.	24	56 82	
"	1000	otn "	~=	02	
51	1857	16th July	42		
-	1865	12th January	39	55	
"	1870	11th August	38	83	_
"	1854	11th May	37	85	
,,	1847	5th August	36	43	_
"	1855	4th October	32	24	
"	1000	Ton October	32	45	_
5	1872	12th December	50	ا ہے ا	
•	1854	3rd August	49	55	_
,,	1847	23rd December	46	33	_
,,	1873	441.	45	17	_
,,	1865	26th January	44	79	_
**	1873	· ·	43	62	_
,,	1856	10th July 29th May	43 41	83	
,,	1860	29th November	41 41	51	_
"		904h		59	_
,,	1878	20th ,,	41	-	_
"	1861	11th April	40	69	_
"	1863	28th January	40	52	_
"	1874	16th November	40	90	_
,,	1875	7th January	40	98	_
,,	1861	1st August	39	бі	_
"	1860	13th November	37	55	_
	1863	2nd "	36	76	

TABLE XVIII. Continued.—Proportions of the Reserve of the Bank of England, &c. Arranged According to Proportion of Reserve.

Bank Rate.	Date.		Proportion per Cent. of Reserve to Liabilities.	Proportion per Cent. of London Bankers' Balances to Reserve.	Proportion per Cent. of Reserve to London Bankers' Balances.
5	1870	28th July	36	8o	
	1878	12th August	36	-	
"	1858	14th January	35		80
"	1877	11th October	35 35	-	30
,,	1853		33 34	94	_
,,	1873	29th September	34	37	94
"		29th ,,	33		34
"	1855	27th ,,		43	
23	1872	9th May	33	75	_
,,	1873	10th ,,	33	73	-
"	1871	7th October	32		91
"	1872	3rd ,,	32	79	<u> </u>
"	1866	6th September	30		96
"	1876	6th January	29	97	_
"	1860	12th April	26	75 82	
,,	1865	2nd October	24		
,,	1856	2nd October	23	67	_
**	1847	8th April	20	74	
41	1860	8th November	80	66	
41	1855		50		
"	1856	5th April	49	35	
"		26th June	49	34 68	
"	1873	9th January 11th December	48		_
24	"		46	70	_
,,,	1865	17th July	44	74	_
"	1859	5th May	42	53	
"	1861	15th August	42	55 58	
"	1870	1011	42	80	_
"	1853	18th ,, 15th September	40	ı	
,,	1855		40	27	
"	1860	10th May	38	30	
"	1872	26th September	37	49	
"	1865	4th May	36	71	
"	1866	27th September	36	65	}
,,	1860	29th March	35	77	
"	1869	6th May	35	35 68	
"	1865	28th September		68	
,,,	1873	8th May	33	73	
"	10,0	0011 1103		/3	ł
4	1873	23rd January	53	50	l —
,,	1848	27th ,,	52	44	
,,	1855	3rd May	52	37	1 —
,,	1871	16th Nov mber	49	83	-
,,	1873	24th July		71	
,,,	1853	1st September	. 47	21	_
"	1877	29th November	. 47	83	<u> </u>
,,	1858	28th January		86	
,,	1861	29th A F gust		60	
"	1863	19th Ferruary		45	-
,,	1870	25 h August		79	
,,,	1875	14th January	.\ 45	85	<u> </u>

TABLE XVIII. Continued.—Proportions of the Reserve of the Bank of England, &c. Arranged According to Proportion of Reserve.

Bank Rate.		Date.	Proportion per Cent. of Reserve to Liabilities.	Proportion per Cent. of London Bankers' Balances to Reserve.	Proportion per Cent. of Reserve to London Bankers' Balances.
4	1878	25th September	44	8o	_
,,	1869	10th June	44	65	-
"	1847	21st January		23	_
**	1860	24th May	1	47	
,,	1870	23rd July		66	_
"	1874	8th January		90	_
,,	1876	27th "	43 42	83	_
**	1865 1855	30th March		47	_
"	1865	6th September 25th May		38	_
"	1874	6th August		54 84	\ <u> </u>
,,,	1872	30th May		58	_
"	1863	15th January		69	_
"	1872	18th September		69	_
,,	1863	21st May		53	
"	1866	8th November		75	_
"	1873	26th March		54	_
"	1860	31st January		45	i
,,	1871	28th September	. 37	70	I —
"	1877	4th October		91	_
,.	1874	15th "	. 36	—	85
"	1875	21st ,,	1	_	85
,,	1869	1st April		69	i —
"	1878	31st July		_	_
"	1872	11th April		80	97
,,	1875 1874	30th December			97
"	1865	30th April		73 78	
"	1000	3rd August	. 20	70	
81	1848	15th June	. 63	16	
"	1855	14th ,,		30	_
"	1873	30th January	. 54	46	_
22	1871	30th November		62	_
"	1873	31st July		63	
"	1861	19th September		52	
"	1869	24th June		53	_
**	1853	2nd ,,		27	_
**	1858 1859	4th February		76	_
99	1859	28th April		46	
"	1859	20th August 2nd June		76	
"	1870	1st September		59 72	
"	1874	15th January		84	_
,,	1876	23rd March		64	
"	1872	13th June		47	
"	1847	14th January		19	_
,,	1866	20th December		50	
,,	1863	23rd April	. 43	62	_
,,	1870	21st July		66	-
,,	1874	28th May		69	_
	1863	16th "	. 41	49	

TABLE XVIII. Continued.—Proportions of the Reserve of the Bank of England, &c. Arranged According to Proportion of Reserve.

Bank Date Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Proportion Pr							
1872 18th July			Date.	per Cent. of Reserve	per Cent. of London Bankers' Balances to	per Cent. of Reserve to London Bankers'	
1875	31	1865	1st June	41	56	_	
1875	,,	1872	18th July	4 1		_	
1872		1875		41	8o		
1865 27th July 33 81	,,		6th November		22	_	
1875	,,,		4th April			_	
1878 Srd July	"		27th July		81 ·		
3 1848 2nd November 61 33	"					79	
1846	"	1878	ara July	31	_	_	
1846	3	1848	2nd November	61			
1871 14th December 54	_	1	l)			
1858		1				_	
1873				1		_	
1870							
1871 21st		1870		l .	ł .	_	
1875		1871	21st ,,	50		_	
1853	,,		28th January	50		_	
1874 27th August 48	,,		20th "	49	24	_	
1859	,,	1 .			11	_	
1862 22nd May	,,				77		
1874 30th July	"		9th June				
1872 20th June	,,,				1	_	
1867	,,						
1876	,,		7th February			_	
1865			6th April			_	
" 1869 15th July 44 69 — " 1869 4th November 44 57 — " 1874 4th June 44 64 — " 1871 28th August 44 81 — " 1861 7th November 43 62 — " 1863 30th April 43 46 — " 1875 8th July 42 — 95 " 1875 8th July 42 — 95 " 1870 19th January 40 54 — " 1860 19th January 40 54 — " 1878 9th 40 — — " 1862 30th October 39 65 — " 1863 3rd December 39 64 — " 1877 3rd May 37 82 — " 1878 26th June 36 — — " 1878 26th June 36 — — " 1879 27th March 33 — — " 1849 18th September 68 11 — " 1849 1st January 61 12 — " 1858			15th June				
3 1869 4th November 44 57 — 3 1874 4th June 44 64 — 3 1877 28th August 44 81 — 3 1861 7th November 43 62 — 3 30th April 43 46 — 3 1875 18th November 43 94 — 3 1875 8th July 42 — 95 3 1871 2nd March 41 65 — 3 1860 19th January 40 54 — 3 1878 9th 40 54 — 3 1862 30th October 39 65 — 3 1863 3rd December 39 64 — 3 1877 3rd May 37 82 — 3 1878 26th June 36 — — 3 1878 26th June 36 — — 3 1849 29th November 66 13 — 3 1852 1st January 61 12 — 3 1859						_	
1874					_		
" 1867 28th August 44 81 — " 1861 7th November 43 62 — " 1863 30th April 43 46 — " 1875 18th November 43 94 — " 1875 8th July 42 — 95 " 1871 2nd March 41 65 — " 1860 19th January 40 54 — " 1878 9th 40 — — " 1868 3rd December 39 65 — " 1845 16th October 38 42 — " 1877 3rd May 37 82 — " 1878 26th June 36 — — " 1878 26th June 36 — — " 1849 27th March 33 — — " 1849 1849 5th September 66 13 — " 1852 1st January 61 12 — " 1859 19th August 55 55 —	-						
" 1861 7th November 43 62 — " 1863 30th April 43 46 — " 1875 18th November 43 94 — " 1875 8th July 42 — 95 " 1871 2nd March 41 65 — " 1860 19th January 40 54 — " 1878 9th 40 — — " 1862 30th October 39 65 — " 1868 3rd December 39 64 — " 1845 16th October 38 42 — " 1877 3rd May 37 82 — " 1878 26th June 36 — — " 27th March 33 — — " 1849 1849 1849 1849 1849 1849 1849 1849 1849 1849 1849 1849 1849 1849 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
" 1863 30th April 43 46 — " 1875 18th November 43 94 — " 1875 8th July 42 — 95 " 1871 2nd March 41 65 — " 1860 19th January 40 54 — " 1878 9th 40 — — " 1862 30th October 39 65 — " 1863 3rd December 39 64 — " 1845 16th October 38 42 — " 1877 3rd May 37 82 — " 1878 26th June 36 — — " 27th March 33 — — " 1849 5th September 68 11 — " 1852 1st January 61 12 — " 1859 9th December 60 26 — " 1869 19th August 55 55 —		1861					
1875		1863		43			
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" 1870 29th September 55 48 —	,,						
		1870	29th September	55	48		

TABLE XVIII. Continued.—Proportions of the Reserve of the Bank of England, &c. Arranged According to Proportion of Reserve.

Bank Rate.		Date.	Proportion per Cent. of Reserve to Liabilities.	Proportion per Cent. of London Bankers' Balances to Reserve.	Proportion per Cent. of Reserve to London Bankers' Balances.
21	1875	29th July	51	95	_
"	1853	6th January	4 8	35	_
"	1859	14th July		57	-
,,	1874	18th June	4 8	63	_
"	1867	30th May	47	49	
,,	1862	9th January	44	71	
29	1871	13th April	4 3	58	
29	1862	10th July		69	
,,	1877	5th ,,	4 2	82	_
,	1868	19th November	4 0	61	_
"	1878	29th May	4 0	_	_
,,	1875	7th October	39	_	93
21	1871	15th June	59	38	_
2	1852	22nd April	64	40	_
,,	1867	25th July	<i>53</i>	64	_
"	1875	12th August	52	89	
"	1871	13th July	51		_
**	1876	20th April		74 89	-
,,	1877	12th July		87 68	
22	1862	24th "		68	_
,,	1878	30th January	44	_	_

Prior to 31st October, 1857, the returns of the Bank of England were dated to Saturday, subsequent to that date to Wednesday.

GENERAL AVERAGES OF PRECEDING TABLES.

Bank Rate.	Times Changed.	Average Proportion per Cent. of Reserve to Liabilities.	Average Proportion per Cent. of London Bankers' Balances to Reserve.
10	2	18	86
9	5	28	73
8 7	15	3 0	78
7	21	32	73 78 67
6 1	2	29	53
6	28	36	δi
5 1	6	37	
5	33	36	67
41	20	43	56 67 58 64
4	40	56	64
31	3 0	45	56
3	35	45	57
21	18	50	50
2‡	1	59	38
2	8	50	73
Number of changes in rate	} 264	-	_

CHAPTER XV.

CONCLUSION.

There are several other points in the statements contained in this volume which may be indicated, though they cannot be followed out further. For instance, it will be found that the amount of the bankers' balances with the Bank of England on the second return in each half-year, that is to say, the second return in the months of January and July, is considerably above the total average of each year, and there is a very marked augmentation in these amounts during the later compared with the earlier years included in the returns. This periodic fluctuation is undoubtedly connected with the payments of the dividends on the funds, and on other fixed securities, and a similar though smaller fluctuation is observable at the corresponding dates in April and October. This increase is probably due to larger amounts of stock held as reserve by the banks of the country generally, and also to larger amounts of dividends received on account of customers. We must bear in mind that the years from 1844 to 1878 have witnessed a very large increase indeed in the business of banking in the United Kingdom. Many persons have accounts with a bank now, who—or their predecessors in similar positions in life—would not have had banking accounts at the earlier date. The increase on the dates mentioned marks this alteration in the habits of the

country, and is interesting on that account.

This point is mentioned, among others, which a careful investigation of the returns relating to the Bank of England will enable the reader to trace. Many matters connected with the conduct of business, many incidents in the transactions of the day which have influenced the adoption of a particular rate on a given occasion, cannot be recorded in the returns from which the figures in this statement have been condensed. We have in this shape but the dry bones, so to speak, of events, all-important at the time to the well-being of the country; but it is hoped that this analysis will be of service in assisting us to thread the history of the past, and may also be of some use in enabling us to see what is needed at the present time.

The subject which was proposed to be investigated in preparing this statement, was the relation of the reserve to the current rate of interest charged. A study of this analysis shows the truth of the usual conclusion, that the rates of discount charged by the Bank of England are regulated more by the proportion of the reserve to liabilities than by any other consideration. That the amount of the bankers' balances, and the proportion they bear to the reserve, may have a bearing on the rates charged is very probable, though their influence is not clearly marked in the tables. The state of the foreign exchanges, quoted for the great European centres of business—Paris, Amsterdam, Hamburgh, and, we must now add, Frankfort and Berlin, as representative of Germany -influences the Bank rate very greatly, though this does not show so much on the surface, as an unfavourable exchange is accompanied by an outflow of bullion, and hence by an immediate diminution of the reserve. It is well known that the directors of the Bank, when fixing the rate to be charged, take the state of the foreign exchanges into careful consideration. The Bank possesses still, though other powerful banking institutions have grown up round it, and appear at first sight to overpower it, so strong an influence over our money market that by setting the rate high enough it can always control the foreign exchanges; hence foreign exchanges generally appear to follow, rather than to lead, the Bank of England rate of discount. No correspondence whatever can be traced between the amount of notes issued and the rate of interest charged. Nor does any other branch of business conducted by the Bank appear to affect it in any way. The proportion of the reserve to the liabilities is the cardinal point on which the rate of interest charged by the Bank turns.

We may observe in this fact a remarkable and exact instance of the operation of one of the principal laws of economic science—the law of demand and supply. The rate of interest generally, as Mr. Ricardo has stated in his "Principles of Political Economy," "is regulated by the rate of profits which can be made by the employ-

ment of capital."*

Mr. Ricardo adds, what is equally obvious: "The rate of interest, though ultimately and permanently governed by the rate of profit, is, however, subject to temporary variations from other causes." + A diminished or increased demand is chief among these, and the extent of these temporary variations is best exhibited in the position of the Bank of England reserve, from the fact that the Bank of England also holds the reserve of the other banks in the country. period over which the investigation extends, the amount of money in the country generally has enormously increased. The gold in circulation is nearly three times the amount it was some thirty years ago. Yet, while the amount of deposits held by the banks of the country —that is to say, of loanable capital—has also been greatly increased, we have far more frequent and rapid

^{*} Page 220, edition 1852.

[†] Page 179.

variations in the Bank rate of interest, and often also a

higher rate.

The explanation of this is that the total amount held in reserve has not increased in a like proportion with the demands which may be made on the reserve; meanwhile, from the altered character of that reserve, there is a greater liability to sudden demands, owing to the vast increase in banking deposits in the United Kingdom during the last five-and-twenty years.

Mr. Newmarch estimated these deposits in 1851 at 260 millions; to which may be added for foreign and colonial banks 25 millions, an aggregate of something like 300 millions. The corresponding figures at the present time are probably between 650 and 700 mil-

lions.

This very great increase in the amounts held on deposit during the last five-and-twenty years may at any moment give occasion for a very considerable demand on the banking reserve. The reserve held by the Bank itself is now somewhat smaller in proportion to its own liabilities than it was in the earlier years over which this survey extends. Meanwhile, the general banking liabilities of the country have enormously increased.

To throw the whole of the duty of maintaining an adequate reserve on the Bank of England is obviously unfair, yet this is the tendency of business in recent years. The keeping a larger supply of unused money would also undoubtedly tend to more equable rates, which would be of great advantage to the commerce of the country. Yet we do not seem nearer to the attainment of a really sufficient reserve than we were when the Bank Act of 1844 was passed. To provide a compulsory amount of reserve by legal enactment would be undesirable, but the object might be arranged without difficulty if an agreement on the subject by the principal banks of the country could be attained.

It is not, in any time of pressure, the amount of capital in the country which is taken into account, or which governs the immediate price of money. It is

not the amount in circulation. It is the actual amount of reserve in hand at the time which decides the stability of the money market. Many exceptional causes, it will be said, have led to the recent fluctuations in the money market, to the vast number of changes in the rate of interest in recent years. But with the immensely extended commerce now carried on by this country, such causes, or similar causes, will be certain continually to manifest themselves, and the only safe course is to be prepared to meet them. To do this we must be prepared to increase the amount of "unused" capital in the country, now so exceedingly small. It is most desirable that proper steps should be taken for the attainment of this, which is essential to the security of banking in this country. It is hoped that the preceding pages may assist to throw some light on the present bearings of this important question. In banking, the only secure position is that of strength, and that strength is connected most closely with the maintenance of an adequate reserve.

THE END.

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